### AMERICAN

# MEDICAL AND PHILOSOPHICAL

## REGISTER.

JULY, 1812.

#### ORIGINAL COMMUNICATIONS.

I.

Account of the Life and Character of EDWARD MIL-LER, M. D. &c. of New-York.

(With an Engraying, by Loney.)

In recording the life and character of this eminent physician, we derive our materials not from the uncertainty of report, or of tradition, but from personal observation and experience, such as habits of daily intercourse have furnished us: the authenticity of our materials may therefore be depended upon; and the opinions we express are what our judgment dictates, so far as our judgment is competent to direct us. There appears to be peculiar propriety in holding up the character of Dr. Miller for general imitation. Our country has as yet produced but few in whom were to be found more eminent talents as a physician, and more general information as a scholar, united with unblemished integrity of conduct, and the greatest urbanity of deportment. May the humble and unadorned narrative of his life awaken the sensibility and rouse the generous emulation of youth, to imitate his virtues and profit by his example.

EDWARD MILLER was born at Dover, in the state of Delaware, on the 9th of May, 1760. He was the son of the Rev. John Miller, and of Mary Millington, his wife. His father bore the relation of pastor to the presbyterian church in that place, with exemplary diligence and piety, for more than fortythree years. His parents had nine children, seven sons and two daughters; of whom, only one son and one daughter now Of his six brothers, two died in infancy. eldest brother, John, who was bred a physician, and who entered the American army as a volunteer surgeon, in 1776, died in February, 1777, in the twenty-fifth year of his age, while on his way from the camp in New-Jersey to pay a short visit to his parents. His next eldest brother, Joseph, who was a counsellor at law, and more than once a member of the legislature of his native state, died at Wilmington, in Delaware, of the yellow fever, in September, 1798, a few weeks after his marriage, and in the thirty-fourth year of his age. His youngest brother, James, who was also bred to the law, died of a pulmonary consumption, in the twenty-third year of his age, at South-Carolina, whither he had gone for his health, in 1795, just as he had concluded his studies, and was about to enter on the business of his profession. These three brothers were all of them men of superior talents, and enjoyed, in a very high degree, the respect and confidence of their native state. His only surviving brother is the Rev. Dr. Samuel Miller, of New-York, of whose learning, talents, and professional eminence it is unnecessary, in this place, to make mention: they are displayed in his various writings on theology and general science, among which may be particularly noticed, his Brief Retrospect of the Eighteenth Century, a performance deservedly placed among the number of those that have most successfully vindicated the literary character of America.

Edward Miller, the subject of these memoirs, passed the first fourteen years of his life under his paternal roof, and commenced his acquaintance with the Latin and Greek languages, under the direction of his father, who was a good Latin, Greek, and Hebrew scholar. At about the above-mentioned age, he was sent to an academy of high reputation, at Newark, in Delaware, which flourished for a number of years under the care of the Rev. Drs. Francis Allison and Alexander M'Dowell. In this academy, the arts and sciences as well as the languages were taught; but it was particularly celebrated for classical literature, and it is no inconsiderable encomium to say, that a great number of the most profound and erudite scholars of our country, acquired their knowledge at this institution. Indeed it was a college in every thing else but in name.

On leaving the academy, where he greatly distinguished himself by his partiality for, and his skill in classical literature, a partiality which he manifested to the end of life, he commenced the study of medicine, under the direction of Dr. Charles Ridgely, an eminent physician in Dover. He soon acquired a high character as a student of medicine, and gained the respect and esteem of his fellow companions; and Dr. Ridgely, with that urbanity and liberality which greatly distinguished him, was so pleased with the talents and deportment of the youthful votary of the healing art, that he made offers to him of the most liberal kind, and always treated him as a favourite pupil. About this time, he attended two courses of medical lectures in the university of Pennsylvania.

On completing his medical studies, or rather as a mean of extending and completing them, Edward Miller spent about a year, in 1781 and 1782, in the military hospital at Basking-ridge in New-Jersey, in the capacity of a surgeon's mate. In the summer of 1782, he went to France, as the surgeon of an armed ship. On that voyage, and while in France, he learned the French language, which he afterwards cultivated and re-

tained, and which he spoke with great fluency. return from France, in the summer of 1783, he entered on the practice of medicine, first in Somerset county, in Maryland, and afterwards in his native town, Dover. In this latter place he settled about the year 1786. In 1785, he was admitted to the degree of batchelor of medicine in the university of Pennsylvania. According to a regulation then in force, it was necessary for that honour to precede the degree of doctor in medicine, at least three or four years. In 1789, he was graduated doctor in medicine in the same institution. On this occasion, having undergone the usual examinations, he submitted, and afterwards published, a Latin Inaugural Dissertation, De Physconia Splenica, When it is considered that he wrote this exercise wholly himself, without the smallest assistance from any one; and that amidst the duties of an active life, he had been out of the habit of writing Latin for a number of years, it affords ample evidence that his early initiation into that language had been of no slight or ordinary kind. In Dover he spent ten years; the greater part of the time in an extensive and successful practice. Here, however, as during the whole course of his life, he manifested a great thirst for general knowledge, and especially for medical discovery and improvement. He generally visited Philadelphia, at least once a year, sought for all the new publications within his reach, sent to Europe for those which he needed and could not procure in America, and at that early period, began that correspondence with eminent physicians beyond the Atlantic, which he continued and extended as long as he lived.

In the year 1796, he removed to the city of New-York, a situation which afforded him a greater field for the exercise of his talents, and an opportunity of enjoying the society of his only surviving brother. Beside discharging the practical duties of his profession, he now devoted himself more closely to the cultivation and extension of the science of medicine. In

a few months after his removal to this city, he commenced, in conjunction with Dr. Mitchill and Dr. E. H. Smith, the publication of the Medical Repository, the first journal of the kind established in this country. Though shortly deprived by death of his much lamented associate, Dr. Smith, he, in connection with his learned and able colleague, continued the management of that work, with distinguished success, for upwards of fourteen years. In 1803, he was appointed resident physician for the city of New-York, which office he continued to hold, with the intermission of one year, to the close of his life. In 1805, he was elected a member of the American Philosophical Society; and, upon the organization of the College of Physicians and Surgeons of New-York, was appointed, by the regents of the university, professor of the theory and practice of physic in that institution. In 1809, he was chosen one of the physicians, and a clinical teacher in the New-York Hospital.

While thus engaged in the discharge of the duties of his profession, he was attacked about a month previous to his death with symptoms of pneumonia, which yielded to the ordinary treatment pursued in that disease. His complaint, however, soon returned with increased violence, assuming the typhoid character, attended with considerable irritation of the nervous system, and great prostration of strength. In this condition he continued until the time of his dissolution, which took place on the morning of the 17th of March, 1812, in the fifty-second year of his age.

His chief publications were, an Inaugural Dissertation, De Physconia Splenica, printed in 1789. His Report on the Malignant Yellow Fever which prevailed in New-York in 1805, in a letter to Gov. Lewis, printed in 1806. His papers in the Medical Repository; and the Appendix to Dr. Thomas's Practice of Physic, containing chiefly the above mentioned "Report," printed in 1811.

From the review of the life and literary labours of Dr. Miller, let us now turn to a consideration of his character. Whether we consider Dr. Miller as a physician or as a man; whether in the walks of public or in private life, he has equal claims to our respect and admiration. Endowed by nature with a mind at once quick in its perceptions and comprehensive in its views, and with a memory extremely retentive and accurate, he acquired, from his great thirst for knowledge and devotedness to study, an intimate acquaintance with the science of medicine. From his proficiency in the Greek and Latin languages, and in those of modern Europe, he was enabled to obtain ready access to the treasures of knowledge contained in the writers of those nations. This knowledge he particularly displayed in his public instructions as a teacher. Of his merits, in the immediate exercise of the duties of his profession, it is unnecessary to enter into any minuteness of detail. To his comprehensive knowledge, he added a patient attention to the safety of those committed to his care, and ever retained a high sense of the responsibility attached to the medical character. To an address the most engaging, from a happy union of dignity, respectfulness, and ease, was added a gravity of deportment that evinced a due concern for the distresses of those whom he was called upon to relieve. The kindred sympathy which his feelings constantly manifested, and the encouragement and consolation which the sensibility of his heart and the resources of his cultivated mind always supplied, enabled him to discharge the double duties of the friend and physician, and alike to minister relief to the afflictions of the mind, with no less efficacy than to the diseases of the body.

The distinction which Dr. Miller attained did not depend upon his acquaintance with those branches of knowledge only which belong to his profession; they indeed were the objects of his primary attention, but there were other objects of which he was far from being neglectful. Believing that liberal and elegant studies give additional lustre to character, and ennoble professional reputation, he devoted a considerable portion of his time to the acquisition of general science and the ornamental parts of literature. From his writings, an idea may be formed of his literary qualifications, and his various accomplishments as a scholar. Their chief object was a defence of the doctrine of the domestic origin of yellow fever, and the non-contagious nature of that disease, a doctrine of which he and Dr. Rush are acknowledged the most zealous and successful advocates.

si Pergama dextrâ
Defendi possent, etiam hâc defensa fuissent.

We have already discussed the subject at some length in the preceding volumes of the Register; we have stated our opinions with an earnestness arising from the deepest conviction of their correctness, and we believe that the facts and arguments we have adduced fully justify the matter of our remarks. In the warmth of discussion some hasty expressions may have escaped us; but we recant not an iota from any thing we have said material to the controversy.

But however highly Dr. Miller was to be admired for the endowments of his understanding and his various attainments, the sentiments of affection and esteem are more forcibly excited by the exalted qualities which adorned his moral nature. In every relation of life, both public and private, he was uniformly guided by principles of the purest integrity. No man seems to have been more sensible of the dignity of his profession, and no one was ever more guarded lest that dignity be sullied. In his political opinions he was uniform and decided, yet the spirit of party never so far influenced him as to become the mountebank politician. Such conduct he considered incompatible with the character of a physician. His fellow citizens manifested a grateful sense of his worth, and appointed him for a series of years to an office of high re-

spectability. Despising the low artifices by which many obtain professional practice, he was distinguished for his fine sense of propriety and honour in his intercourse with his brethren of the faculty. The writer of this imperfect sketch, who has often witnessed his delicacy in this respect, would do injustice to his own feelings were he not to state, that his deportment conciliated the affection of all, and is worthy of universal imitation. As a philanthropist, he exercised an extensive charity to the poor in gratuitous medical services. It were needless to dwell upon his character, as displayed in the circle of his immediate friends, whom the ties of consanguinity, or whom similar inclinations and pursuits had united in the bond of friendship. He evinced all the energies of social affection; he loved with all the warmth of fraternal kindness.

New-York, May 22d, 1812.

### II.

OBSERVATIONS on the use of the COLD AFFUSION in TETA-NUS and CONVULSIVE DISORDERS, read before the Medical Society of South-Carolina, on the 2d March, 1812. By THOMAS G. PRIOLEAU, M. D. Communicated for the Register, in a letter to Dr. HOSACK.

To the Medical Society of South-Carolina.

As the external application of cold water in fever and some other diseases is rather a novel practice in this state, and as yet adopted by very few physicians, I think it my duty to lay before this society, a detail of several cases, selected from a great number, in which I have employed it with success. I do this with a hope of inducing other gentlemen to make trial of a remedy which I cannot but regard as very efficacious, and indeed almost certain, in typhus, a certain species

of pneumonia,\* tetanus, and convulsive disorders. Though the rules laid down by Dr. Currie are excellent, and should be observed as far as they apply, yet they may be extended further; that excellent physician conjectures, that it would be equally beneficial in many inflammatory diseases. Dr. James M'Bride, of St. Stephen's Parish, in this state, and myself, have tested the truth of the conjecture by our practice. It was my intention, to the cases now detailed, to have added others of typhus as successfully treated under the same plan; but, from several considerations, I am induced to defer them to a subsequent meeting of the society.

I cannot omit paying my small tribute of respectful praise to Doctor James Currie, of Liverpool, to whom we are indebted for this improvement in medical science, and whose memory, as long as philanthropy warms the human breast, must be gratefully cherished by every lover of science and friend of humanity. I think it proper to mention, that this remedy was, I believe, first extensively used in this state, in typhus, by Dr. James M'Bride, of St. Stephens, about three years since (1808.)

Case first. Tetanus, cured by the cold affusion.

On the 9th of August, 1811, I was requested to visit a negro fellow, belonging to John Ball, Jun. Esq. of St. John's Parish, Berkeley. I was informed that the fellow had had frequent convulsive twitches and startings during the whole of the day preceding, which becoming more violent in the evening, terminated in complete tetanus, the paroxysms continuing about fifteen minutes, and the periods of intermission about half an hour. He had been in this state several hours before I saw him. I found him with his head and body bent back,

<sup>\*</sup> See Le Conte's History of an Epidemic in Georgia, 1809, in the Medical and Philosophical Register, for October, 1810.

his jaws locked, his countenance distorted, and the muscles of the extremities rigidly contracted; his breathing was stertorous and difficult, his skin hot and dry, and his pulse at ninety, weak and quick. In this situation he continued a quarter of an hour, when the spasms relaxed, and the paroxysms went off; he then complained of great soreness, and pain in the scrobiculus cordis, and the muscles which had been rigid; he could swallow, but with great difficulty, and dreaded doing so lest it should hasten the succeeding paroxysms; his bowels were costive; his skin still continued dry, but its heat had moderated; his breathing was easy, and his pulse at eighty-five, slightly tense; he had slight convulsive twitches; he had not taken any thing during the day but a little water.

I found it difficult to ascertain the cause of his disease, and could not ascribe it to the weather, as the thermometer was but 84 deg. Faren. and the nights generally cool, but not more so than was usual at that season. The only cause the patient could assign, was a cut he had received by an ax, on the anterior part of the leg, five or six years before; he felt no pain in the part, and the place where the wound had been was only discoverable by a small cicatrix: I did not lay it open, or indeed make any external application, as I wished to give the cold affusion a fair trial. I thought even scarification unnecessary, it being doubtful whether the disease arose from the wound or not, as the patient had not experienced any pain or particular sensation in the parts.

I ordered about ten gallons of cold water, which was at the temperature of 65 deg. Faren. to be brought, my intention being to have the whole thrown over the patient at the moment of the recurrence of the next paroxysm. In twenty minutes from the time the last fit ceased the breathing became loud and difficult, the pulse quickened, the heat of the skin increased, the body bent backwards, and all the symptoms previously described returned. He was immediately taken out

of his blankets, and the cold water thrown over his naked body; the effect was instantaneous; the spasms ceased, the breathing became easy, and the muscles completely relaxed; he was then wiped dry, and put into his blankets, a copious perspiration came on, his skin became cool, and in two minutes his pulse sunk to 76, and became full and round; he grew calm and composed, and experienced as fully as I ever had before observed in any case, the refreshing influence of the affusion. His only complaints now, were a general sense of weakness, and a dull pain or soreness in the scrobiculus cordis, and muscles which had been affected. I gave him forty drops of tincture opium, and ordered him to be kept as quiet and undisturbed as possible.

I remained with my patient some time after the affusion had been used, and during the time he had not the slightest return of the disease; he was inclined to sleep. When I left him there were no disagreeable symptoms present, his pulse was eighty, and natural. I desired the attendants, if the disease should return (which I thought doubtful) to repeat the affusion as soon as the paroxysm was formed, as it had already been attended with such beneficial effects.

In ten hours from my leaving the patient, I again saw him, and was told by the nurse, that he still remained free from the disease, and had not had the least indication of its return, but had sunk into a sound and refreshing sleep, which continued five or six hours; and that when he awoke, he had an evacuation by stool. He said he was well, but felt debilitated, with a slight degree of soreness over the body; he had taken some nourishment. Upon examination, I found his skin warmer and drier than natural, his pulse eighty-eight, and quick, his tongue slightly furred, and his respiration quickened. Conceiving that these symptoms indicated a return of the disease, I thought it requisite to remove them, and again employed the cold affusion, which was attended with its usual good effects,

reducing the frequency and quickness of the pulse, taking off the heat and dryness of the skin, &c.

It being out of my power to remain with my patient, I ordered the nurse to use the affusion if any symptoms should come on which appeared to indicate a recurrence of the disease; but as I thought it probable some disagreeable circumstances might take place at night, to repeat it then and the next morning. The next day (the 10th) thirty-four hours from the commencement of tetanus, I again saw the fellow, the cold affusion had been used the preceding night and that morning; he slept well, had a good appetite, and was so completely convalescent, that I discontinued my attendance.

We meet, in many medical publications, with accounts of cases of tetanus, which have been cured by the most opposite treatment; the most powerful stimuli and extensive depletion have been alike resorted to with success, in some instances, and the want of it in others. To reconcile this diversity of result may, perhaps, not be very difficult. The disease has lways been considered as one of the opprobria of medicine; may not this have arisen from physicians not taking sufficiently into consideration the state of the patients system at the time they prescribe? A remedy which to one man may be beneficial, to another, under the same disorder, has been often known to prove fatal. Remedies, therefore, which have frequently proved successful, may prove otherwise, and to prescribe with effect, a knowledge of the disease and the remedy appear to be essential. Let me then explain what I think I have observed upon the subject of this disease, and the modus operandi of the remedy. I offer the theory with great deference, and shall be gratified if it should lead to an investigation by which truth may be discovered.

Tetanus, from whatever cause it may arise, I conceive to be a disease of general and great morbid excitement, tending rapidly to the dissipation of excitability; its progress, however, being somewhat regulated by climate, hot and cold weather, predisposition, and many other circumstances. From this it would seem, that in the commencement of the disease it would be necessary to employ the antiphlogistic plan of treatment, in order to lessen the morbid excitement; but after the disease has formed some hours, and while the excitability is fast dissipating, we must have recourse to stimulants, accommodating them, however, to the state of excitement and excitability. The greater the marks of excitability, the stronger and more diffusive should be the stimuli, to convert the excitability into excitement and health; small doses, under such circumstances, would be injurious, as they would tend to dissipate the remaining excitability.

In this case, had I seen my patient but a few hours later, the excitability would have been so much exhausted, that the strongest stimuli would have been necessary before we could have raised the system to the point of reaction; consequently, until this had taken place, the cold affusion must have proved injurious. Fortunately, I saw the fellow at the time when the cold affusion was most palpably indicated; its use was therefore attended with complete success.

The succeeding cases are those of convulsions, the first in some measure constitutional, the others induced by the usual remote causes of the intermittent and remittent fevers of the country.

Case 2d. In October, 1810, I was called to a negro fellow, about twenty-six years of age, who was in convulsions. I was informed that he had been attacked in the same manner, about this season of the year, for the last three or four years, the disease always continuing three or four days; that while he was in this situation, various remedies had been resorted to, both by physicians and nurses; he had been bled most copiously at one time, and at another had taken the strongest stimulants and antispasmodics, but without the least advan-

tage, the disease always continuing to its accustomed period. When I saw the fellow, he was in a state of coma, attended with convulsive twitches; his breathing was loud and difficult; his skin hot and dry; and his pulse one hundred and twenty, quick and weak; his eyes half closed, and the iris very considerably dilated. In this state he continued about ten minutes, when an exacerbation of the disease took place; he became dreadfully convulsed and drawn backward. Such had been his situation for eight hours before I saw him, the paroxysms lasting about ten minutes, and succeeded by coma for the same length of time alternately.

I ordered about twenty gallons of water, (the temperature sixty-five degrees,) to be brought, and as the violent convulsions returned, he was taken out of his blankets, and the whole thrown over him. This was the only remedy that had made any impression on him since the attack; he shrunk from the The affusion immediately stopped the paroxysm, but the coma still continued. He was wiped dry, and put between the blankets, immediately the pulse sunk to one hundred, and became stronger and fuller, the skin was cool, but no sensible perspiration evident. In this way he continued about twenty minutes, when a recurrence of the paroxysm taking place, the same quantity of water was again thrown over him; this had an effect similar to the last affusion, and lengthened the return of the next paroxysm to three quarters of an hour; his pulse was now ninety-five, and some perspiration was perceptible on the breast and forehead.

Another paroxysm now came on, being preceded as the others, by increase of heat, and quickness of the pulse; the affusion was again used, and with much advantage; his pulse became nearly natural in frequency, was full and stronger, the skin moist, and respiration easier. The coma still continued, but less violently.

As I was now obliged to leave the patient, I ordered the attendants not to repeat the affusion unless the recurrence of a paroxysm took place. In this state he continued for sixteen hours, when a paroxysm coming on, recourse was again had to the cold affusion; the fit ceased immediately, and sensation returned perfectly. From this time he was convalescent; his pulse was full, at eighty-five, and somewhat tense; the breathing was easy and natural, and the skin moist. He complained of pain in the head, and great soreness of the body generally; I ordered him a cathartic of calomel and jalap, which operating, relieved him considerably. The following day, I again saw my patient; he had not had the least recurrence of the disease since the day before, and was so well, that I discontinued my attendance. He has continued well ever since, and passed the usual period of the attack of the disease without any disagreeable circumstance attending.

Case 3d. Miss Charlotte Prior, in St. John's Parish, Berkeley, a girl of twelve years of age, was attacked with fever, on the 20th August, 1811, so slightly that her parents thought it unnecessary to call in medical assistance, but gave her a gentle cathartic, which operating, left her free from fever in the evening. During the night the fever returned, accompanied by violent convulsions. I was then sent for, but did not arrive until the 22d, after a lapse of thirty-six hours from the attack, the whole of which time she had continued convulsed, and in a state of insensibility. Several medicines had been given her, as tincture opium, tincture assafætida, &c. she had also blisters and sinapisms applied to the body and extremities, but without the least effect. When I saw her, her pulse was weak and quick, and so frequent, that it was with difficulty counted; her breathing was stertorous, the tongue dry and furred, and the eyes half closed; the skin was hot and dry. For a few minutes the convulsions subsided into convulsive twitches, but soon returned again vio-

In this case the cold affusion was most strongly indicated by every symptom; it seemed to me the only thing that promised any relief; and after I had succeeded in removing the prejudices and objections of the parents, I caused her to be taken out of bed, while the convulsions were most violent, and ten gallons of water, sixty-five degrees, into which a pint of common salt had been dissolved, to be thrown over her naked body. She was then wiped dry and put into bed, immediately a perspiration came on, the heat of the skin moderated, the pulse sunk to ninety, and became more full; respiration easy. She now readily drank some cold water which was offered her, the only thing she had been able to swallow for several hours; she lay quiet and easy, apparently in a sound sleep, without the least starting or convulsive motion. In this state she remained two hours, when the breathing again became loud, the skin hot, and the pulse quickened, and increased to one hundred and twenty; she started violently. She was again taken out of bed, and the cold affusion repeated; it was attended with complete success; her pulse sunk to ninety, and became full and strong, a copious perspiration came on, and her breathing was easy; her senses returned. The cold affusion was not again used; as the disease went off from this time, I ordered her a camphorated julap; and the next day she began to take the peruvian bark, and was conva-The blisters and sinapisms had by this time drawn, and gave her considerable pain.

I have only now to remark, that in a tolerably extensive practice, during the three years last, in which I have often used this remedy, I have seen only two cases of convulsions, in which the cold affusion was unsuccessfully used: the one was of a young child, in which the remedy was resorted to at a late period of the disease, and with a very feeble hope of suc-

cess; the other was the daughter of John H. M'Call, Esq. a child of eight or nine years of age; she had, but a week previous to her being attacked with this disease, recovered from a severe typhus fever, in which the cold affusion had been successfully used; she was therefore much debilitated, and her strength was only sufficient to enable the system to react fee-bly. The convulsions were checked by the affusion, but the debility was so great that nature was soon exhausted: other remedies were also used in both these cases. They occurred during the last summer, one of the most unhealthy seasons that has been known for several years.

Charleston, March 2, 1812:

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OBSERVATIONS on the Influence of Habit in accommodating Animal and Vegetable Life to Diversity of Climate and Temperature: on Torpidity, Vital Suspension, and Revivescence, as exemplified in the Phenomena of Hybernating Animals: Cautions on the Treatment of Vital Suspension, with a view to elucidate the theory and improve the practice. By A. Fotherfield, M. D. F. R. S. Member of the Royal College of Physicians, and of the Medical Societies of London, Edinburgh, Paris, &c. &c.

Opinionum commenta delet dies nature judicia confirmat.—Bacon.

So admirably is the human frame constituted, as to enable it to accommodate itself to all the varieties of climate, and all the vicissitudes of seasons; to sustain the fervors of an equinoctial sun, or brave the rigours of a Siberian winter. Man, though born naked and defenceless, finds means to guard himself against the utmost extremes of heat and cold, which otherwise would prove incompatible with life. But to his native

powers is superadded that divine attribute, reason, which is no sooner matured, than it gives him a decided superiority over all other animals, not only in sustaining hardships, and bearing vicissitudes, but in contemplating, with an eye of intelligence, the past, the present, and the future. Other animals are, with no less wisdom, adapted to their situation, and endowed with instinct, which well supplies the place of reason, by enabling them to provide for themselves, and shelter their young against the inclemency of the seasons. Hence, no climate yet known, can be pronounced too hot or too cold for its native inhabitants. But man is destined to take a much wider range than other animals, which qualifies him to become a citizen of the world; to explore its highest mountains, and deepest mines; to traverse the ocean from pole to pole, and hold social intercourse with the remotest nations, even with the antipodes. With such natural powers and pliability of constitution to bear such variety of climate and extremes of temperature with impunity, whence is it that a large portion of mankind can scarcely sustain the sudden variations of their native climate, however temperate, without contracting some malady? The hardy Russian, on emerging from the hot vapour bath, though reeking from every pore, hastily plunges into cold water, or delights to roll in the snow. The pampered East Indian, who by luxury and indulgence has reduced himself to the state of a hot-house plant, contemplates the Russian experiment with horror, and though wrapped up in his furs, shivers at every cool breeze.

Men are so much the creatures of habit, as to become just what early discipline and education conspire to make them. Fashion betrays her votaries into a mistaken tenderness and over delicacy, in the treatment of children, highly unfavourable to health and firmness of constitution; hence that morbid susceptibility, which renders them tremblingly alive to sudden changes of weather, and becomes a source of many se-

rious evils through the subsequent stages of life. Nor is this all; the same valetudinary predisposition is often unfortunately transmitted from parents to children. It may indeed be acquired, at any period of life, by intemperance, long abstinence, depressing passions, or whatever tends to weaken or enervate the system; but whether hereditary or acquired, it can never perhaps be entirely subdued, but by firm resolution, and perseverance in establishing a contrary habit.

Heat and cold being in reality only relative terms, their operation on animal and vegetable life varies, according to the state and habitude of the animal or vegetable to which they are applied. Persons inured to the changes of a variable climate can well bear the extremes of temperature, which, to a new comer, seems almost insupportable. Mr. William Dunbar of Natchez, relates his having witnessed the existence of living animals and vegetables in the hot springs of Ouachita, the extraordinary temperature of which is said to approach the boiling point.

A counterpart of this singular phenomenon was observed by Dr. S. Brown of Lexington: some grains of wheat, accidentally left in straw employed to cover a solid mass of ice in an ice house, vegetated at the wonted season, and penetrated the transparent ice to the depth of nine inches, by innumerable fibres of the root, which had thawed for themselves sufficient openings.\* Such is the energy of the vital principle in vegetables, as well as animals, in resisting extremes of temperature, and in accommodating them to uncommon and even perilous situations.

In the well known experiment recorded in the Philosophical Transactions, Dr. George Fordyce, and his philosophical companions, sustained, for a considerable time, the temperature of the room, when heated to the amazing degree of 214.

<sup>\*</sup> See American Medical and Philosophical Register, vol. 2d, p. 448.

of Farenheit's thermometer, which exceeds the heat of boiling water! To complete the bold experiment, they issued out of the scorching room into the cold evening air, and walked home without suffering any inconvenience. On the other hand, delicate and fashionable females, overpowered by the heat of a room of 75 or 80, sometimes faint away.

The vegetable tribes, equally susceptible of heat and cold, and other atmospheric impressions, also promptly obey the impulse of their early habits. Some prefer shady places, others delight to bask in a sunny situation; some resist the severest winter, others are rendered torpid and lifeless by a single night's frost. The delicate natives of the torrid zone, when transplanted into a cold, or even temperate climate, droop and become sickly, till they are indulged with a proper degree of artificial heat, when they soon recover, and, by gentle means, may be trained to bear the open air, even in winter, till they become perfectly naturalized: yet for some time they claim their wonted periods of germination and flowering; for necessity alone can force them to relinquish their early habits.

Their ability, however, to acquire new habits, or to sustain great extremes, can only be attained by very slow degrees; for sudden transitions are equally inimical to animal and vegetable life; hence, delicate valetudinarians become living barometers. In such persons, a sudden change from cold to heat rarifies the fluids, and causes immoderate excitement, which tends to exhaust the vital powers. On the other hand, a rapid transition from heat to cold, benumbs the faculties, condenses the fluids, diminishes excitement, and produces torpidity. Thus two opposite extremes, unless timely moderated, tend to the same fatal point, namely, the extinction of vitality. To restore the balance to the due medium of natural excitement demands the utmost caution.

2dly. Hybernating animals; their torpidity; vital suspension; and re-animation.

Let us next inquire whether the periodical torpidity and revivescence of hybernating animals, may not reflect some light on the subject of vital suspension in the human species.

Among the various animals subject to this property, the marmot and the dormouse have chiefly attracted the attention of philosophers, and their habitudes are best understood. Soon after the autumnal equinox, when the mercury descends below forty-two degrees, their drowsy disposition warns them to retire to their winter cells, where they coil themselves into a ball, and probably from the pleasurable sensations which accompany the first stages of sleep, they willingly yield to their destiny, and pass the dreary season of the year in a profound sleep, which affords a substitute for food. Torpidity then appears to be a wise law, imposed on these creatures to preserve their species from famine, at a season when otherwise they would perish.

Whether it is occasioned by a peculiar organization and absorption of fat, as some imagine, or merely the effect of habit, as others contend, has not been determined; to us it seems more probably to consist in a diminution of the functions of the brain and vascular system, brought on by the simple operation of cold, on bodies debilitated by scarcity of food, and is better calculated to explain the phenomena.

By a periodical repetition of concurring circumstances, it becomes habitual; but the habit, whether voluntary or involuntary, seems doubtful. It may, however, be broken by art. Professor Pallas kept a marmot in a state of vigilance through the winter, by means of a warm stove, and plentiful supply of proper food. Mr. Gough, by similar means, preserved a dormouse in activity. During their torpidity, respiration being suspended, and with it the generating power of heat, they become cold; motion, sensation, and all the functions cease, and they appear to be dead: if roused from this torpid state by violence, they languish and die: if left undisturbed in their

cells, they revive about the vernal equinox, without any apparent cause, except the return of the vernal warmth. Mr. Gough informs us, that a garden snail, which had remained torpid three years, was, to his surprise, revived by merely immersing it in water. Eels, frozen till they become stiff and brittle, if covered with ice, may be transported to remote places, and yet, by cold immersion, return to life; but perish on the application of heat.

Plants, on the approach of winter, are in some measure subject to the same law; the stems of annuals die to the root; trees are stript of their foliage; the progress of vegetation is suspended; the feathered tribes are pensive and silent, and all nature seems to partake of the torpific disposition. Nor would man be wholly exempt, did he not counteract the propensity, by nourishing food, warm clothing, brisk fires, active employments, and social intercourse. When he is exposed to fatigue, cold, and hunger, he is compelled to yield to the common law; hence, in a rigorous season, the frequent instances, among distressed travellers and shipwrecked mariners, of persons frozen to death. In this melancholy situation, the first precursor of torpidity is an almost irresistible propensity to sleep, which, if unfortunately encouraged, proves the sleep of death. Of this deplorable state, the author of the "Seasons," in his winter scene, gives a pathetic and picturesque description.

"And down he sinks
Beneath the shelter of the shapeless drift,
Thinking o'er all the bitterness of death:
Mix'd with the tender anguish, nature shoots
Thro' the wrung bosom of the dying man.
On every nerve

The deadly winter seizes; shuts up sense;
And o'er his inmost vitals, creeping cold,
Lays him along the snows, a stiff ned corse,
Stretch'd out and bleaching in the northern blast."

From the preceding observations, we learn by what mild and simple means nature restores dormant animals from torpidity and insensibility, to life and activity. Among those above mentioned, the dormouse and the marmot belong to the mammalia, and rank in the same class with man. During their torpidity, they are insensible to all stimuli, and afford a striking instance of the fallacious signs of death, and how easily the semblance may be mistaken for the reality. Shakspeare, who with eagle eye penetrated the hidden mysteries of nature, appears to have known this curious circumstance.

"Death may usurp on nature many hours, Yet may life kindle again the o'erprest spirits."

The habitudes of torpid animals indeed, present a new field for future experiments, replete with useful instruction. Their revivescence, after a period of time which staggers credibility, shows how little we yet know of the extreme boundary to which it may extend, or where to fix the line between apparent and absolute death.

Medical science, improved by philosophy, and prompted by disinterested humanity, has, in modern times, rescued many persons apparently dead, from drowning, suffocation, or lightning, who formerly would have been given as in despair, and consigned to the grave. Nor are instances wanting, in these more enlightened times, of the like unhappy deception, particularly in cases where all hopes had vanished many hours before the funeral service, and where the error was not discovered till the day after interment; a circumstance too painful to contemplate! What an awful caution against hasty funerals, and particularly after sudden seizures, or where appearances are equivocal.

3dly. Cautions on the treatment of vital suspension, with a view to elucidate the theory and improve the practice.

In restoring suspended animation, notwithstanding the numerous examples of success, yet unexpected failures but too often occur, and where they were the least apprehended. Sometimes, after the most promising prospect of speedy recovery, a fatal relapse ensues, and blasts every hope of success. This, it is to be feared, sometimes happens from an incautious use of the most powerful stimulants, beginning at the top instead of the bottom of the scale, by which forcible mode of excitement, the feeble spark of vitality is unhappily extinguished. Thus may an over officious zeal defeat the most benevolent intentions; but the humane and prudent practitioner will gain wisdom even from his failures.

Here, so far as we can safely reason from analogy, the example of torpid animals affords an instructive lesson. When exposed to sudden heat or violent excitement, they perish; when left to the lenient hand of nature, they uniformly recover. The dormouse above mentioned, while the mercury stood at forty-two degrees, remained torpid; but when the thermometer rose to forty-seven degrees, the animal awoke, and became active. The dormouse which Mr. Hunter exposed to the reduced temperature of twenty degrees, being twenty-two degrees below the natural point of torpidity, brought life into imminent danger, which increased its powers of generating heat, and raised its own temperature from eightyone to ninety-three. Such is the power of the animal economy to resist sudden changes of temperature, to accommodate itself to its situation, or repel danger. Yet according to M. Buffon, the generating power of heat in this and other torpid animals, has been found to be comparatively small.

The natural degree of human heat, at all ages, and in all climates, is between ninety-seven and ninety-eight degrees; but may be raised, by fever, to one hundred and ten, or reduced, by a prolonged immersion in a very cold bath, to seventy-six, which, though somewhat hazardous, is not incom-

patible with life, nor the accommodating powers of the system to adjust. What further reduction of human heat, by a refrigerating process, would be requisite to produce general torpidity or apparent death, we are yet to learn, and still more so as to the extent it might be carried consistent with a possibility of recovery. But on this important subject, many observations and experiments are still wanting, some of which could be only warrantably performed on brute animals. What approaches to the hopeless state alluded to, is that of a person, in a rigorous season, drowned under ice, till his extremities are frozen, and life apparently extinguished. When such cases occur, they afford the practitioner a fair opportunity of availing himself of the result of well directed experiments, for ascertaining the requisite degrees of excitement, and for conducting the whole process with more precision.

In all cases of apparent vital extinction, the same phenomena, already hinted, are observable. Respiration being suspended, the power of renewing heat ceases, together with sensation and voluntary motion, and the surface of the body is gradually reduced to the temperature of the circumambient atmosphere. But the heart and internal parts retain a portion of warmth and irritability some time longer, and while this continues, are more or less susceptible of motion, on the application of stimuli. Hence, to restore animation, the primary indication is uniformly the same, namely, to renew the action of the heart and respiratory organs; this happily accomplished, the brain and other organs gradually renew their respective functions. The judicious practitioner, regarding all existing circumstances, will regulate the treatment accordingly; not by violent means, but by gentle excitement gradually increased. Experience of late years has shown, in various cases of apparent death, from lightning, from the fumes of charcoal, or from other noxious gasses, that the early application of cold water has happily succeeded in producing reaction,

after the common heating process had entirely failed. Therefore, instead of exposing the torpid body to the heat of a fire, or of a warm bath in a close room, he will allow the free admission of the open air, and apply snow or cold water, increasing the temperature by slow degrees, accompanied, not with violent rubbing, but very gentle friction. Instead of blowing into the nostrils the contaminated air of respiration, he will inflate the lungs, first with atmospheric, and afterwards with vital air. Instead of injecting the sickening, debilitating fumes of tobacco, he would convey into the stomach and bowels tepid water, and afterwards a portion of wine; observing from time to time, by the thermometer, the state of the internal temperature, increasing the means of excitement, by gentle degrees, from the milder to the more powerful, from the shower bath to the galvanic stimulus, the final test of vitality, or until signs of respiration or returning life should appear: when he would gradually diminish the means of excitement, carefully watching the progress towards recovery till all danger should be past.

Having in a former inquiry discussed this subject more at large, and submitted to the Royal Humane Society such improvements in the ordinary process, as the advanced state of medical science suggested, and experience justified, we beg leave only to transcribe the following passage, and for further particulars, respecting the extreme caution that is necessary in such a critical situation, refer our learned readers to the work itself.

"When this state of torpor or apparent death is brought on, whether in the marmot or the man; whether by the sedative effects of cold, or by submersion, the phenomena in both are extremely similar; both are bereft of sense and motion; both lose a large portion of animal heat; both are restored by a gentle degree of warmth, but destroyed by too great or too

sudden heat; both on their first recovery exhibit similar efforts towards restoring respiration and circulation.

"If the recovery of the marmot is more uniformly certain, it is not only because in him the torpor is more gradual, but because the degree of heat is regulated by the steady unerring hand of nature; in man by the uncertain rules of art, or even by the caprice of the moment."\*

### Recapitulation and Conclusion.

From the preceding observations it seems reasonable to draw the following inferences:

1st. That the human frame is enabled to bear the extremes of heat and cold, and varieties of climate, beyond that of other animals; and that his reason gives him a decided pre-eminence over the whole brute creation.

2d. That men are the creatures of habit and early education: hence the importance of early discipline in training up young persons in habits of hardiness, and inuring them to bear the inclemencies of tempestuous seasons: hence also the numerous evils resulting from an opposite mode of education, introduced by fashion and modern refinements.

3d. That the animal and vegetable tribes are alike subject to habit, and may be gradually naturalized to a climate very different from their own, and trained by degrees to acquire new habitudes.

4th. That the effects of heat and cold being only relative, the extremes are not incompatible with health, in persons of firm constitution, though serious evils ensue from sudden transitions, where the body is predisposed by excessive excitement, or any other debilitating cause: hence, in persons overheated or fatigued, the frequent instances of syncope or sudden death, from drinking cold water, or the no less imprudent

<sup>\*</sup> See New Inquiry into the Suspension of Vital Action, 3d edition.

use or abuse of iced water or iced creams: hence also, the comp de soleil, apoplexy, phrenzy, or insanity, from sudden exposure to extreme heat; and hence the catarrh, rheumatism, or palsy, from sudden exposure to extreme cold. That the sudden excitement produced by ardent spirits, however exhilarating for the present, is more than counterbalanced by the subsequent languor and debility; hence the pernicious error of those who drink inebriating liquors to fortify themselves against the extremes of heat or cold, or the depressing effects of grief or anxiety.

5th. That the torpidity of hybernating animals is a wise law of nature, and becomes periodical by habit, yet may be interrupted by art; that a slighter degree of torpor from the cold of winter pervades all nature, and that man is not wholly exempt; that sudden excitement, by heat or violent means, is destructive, and that nature points out a more safe and lenient method of reanimation.

6th. That in vital suspension, from torpidity, submersion, or whatever cause, the phenomena being similar, the principal indications of cure are the same: hence the feeble remains of vitality demand, that the plan of treatment should, in that critical situation, be carried on by gentle degrees of excitement gradually increased; that the cooling plan, in the beginning of the process, has been found more successful than that of artificial heat, or enervating fumes of tobacco.

7th. That the laws of nature are steady in adapting the means to the end, and therefore uniformly successful; while those of art are uncertain and capricious, and therefore often fallacious.

BACON

<sup>&</sup>quot;Opinionum commenta delet dies naturæ judicia confirmat."

#### IV.

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AN ACCOUNT of a case of Strangulated Inguinal Her-NIA, in a letter from Lewis Heerman, Esq. Surgeon of the United States Naval Hospital, New-Orleans, Honorary Member of the Physical Society of Guy's Hospital, &c. to Valentine Mott, M. D. Professor of Surgery in Columbia College, Corresponding Member of the Medical Society of London, &c.

New-Orleans, March 23d, 1811.

My dear friend,

To gratify you, I have enclosed a faithful account of facts, as they occurred in the case of hernia, in which I lately operated. It will not, I am conscious, strike you for its novelty, since numerous and hopeless cases that have been recorded have terminated favourably; but since it is a standing practical rule of every celebrated school, and of the most experienced surgeons, that it is too late for the operation, when tension and tenderness of the abdomen unequivocally demonstrate the presence of peritoneal inflammation; and that it would be wanton cruelty to propose the operation, when the period at which hiccup was first observed had been allowed to pass without taking advantage of it; I conceive that exceptions to these general and well founded observations cannot be too numerous, in order to draw an inference from them collectively, in favour of operating. Whereas, without this support of living evidence on our side, the prudent, or rather the timid surgeon, would withhold his professional aid, and content himself by theorising passively on the cause of his patient's approaching dissolution.

It is with this view, my friend, that I offer it to you; and if, in the public situation to which your merits have elevated you, it can be made in any way useful, you are at liberty to-do it.

With indelible sentiments of respect,

I am your affectionate friend,

LEWIS HEERMAN.

VALENTINE MOTT, M. D. &c.

While was about a conservation to

CASE.

Doctor Schoolfield, of the United States schooner Enterprise, informed me, on Tuesday, 23d May, that on the preceding evening he had been consulted on a case of strangulated inguinal hernia, by Dr. Dayer, surgeon's-mate of the United States frigate United States, and observed, that having found the abdomen tense and painful, and the patient to hiccup frequently, he had suggested to him the propriety (especially as the surgeon of the ship had not yet joined her) of turning the man over, as soon as possible, to the hospital at the navy-yard. Having been kept in waiting by this intelligence during the remainder of the day, without the arrival of the case at the hospital, I sat out in the evening, accompanied by my assistant, Dr. Blair, and went on board. Here I was informed by the assistant surgeon of the ship, that John Waters, a seaman on board, had applied to him four days ago, with a hernial protrusion into the scrotum on the right side; symptoms of strangulation, such as colic pain, eructation, vomiting, and costiveness, had attended it since its first occurrence; and he was observed to hiccup at intervals since yesterday evening, and to have much tension and tenderness of the abdomen. The patient had been bled copiously, so as to produce syncope, and the abdominal muscles in particular had been relaxed by posture, before any attempts had been made to reduce it: he had taken after that, calomel and opium; had laxative and tobacco injections given him, and cold applied to

the groin and scrotum, without enabling Dr. D. to succeed with the taxis.

On seeing the patient myself, the doctor informed me, that the hiccup had become more loud and frequent during the day; that he vomited much oftener, and that the tension of the abdomen and tenderness on pressure continued unabated.

I found his pulse frequent, and rather tense, but not as small as, from accompanying appearances, I should have expected. The face and shoulders were covered with large drops of perspirable matter; his tongue was dry, and thickly encrusted with brown sordes, so as to make it rough and craggy; and the temperature of his extremities, though not of an icy coldness, was considerably below that of the trunk; the tumour itself was painful on being handled, and the integuments of it inflamed; but as yet it continued tense.

The means that had been employed having failed of success, the two gentlemen present urged the immediate performance of the operation, as the only possible chance by which he might be recovered from his impending fate. I concurred in their opinion, and confess that, with the exception of his pulse, I had nothing to hope from the operation.

The patient having been laid on a table, with his legs hanging off, the incision through the integuments was commenced, a little above the external abdominal ring, and carried along the whole of the tumour. The superficial fascia, the cremaster, and hernial sac, were subsequently divided, and could be readily distinguished from each other, in the progress of the operation, although it was by candlelight that I performed it. The effusion of serum within the sac was considerable, and the protruded intestine was a small fold of ileum. It was pressed upon considerably at the external ring, and this obstruction was removed by an incision upwards, through the tendinous fibres of the external oblique, without, at the same time, wounding the sac or cremaster, which had been left un-

divided to within one quarter of an inch of the external abdominal ring; but still the intestine could not be returned without dilating another stricture at the mouth of the sac, or internal ring, and which was accomplished, straight upwards, in the manner directed, and with the knife recommended by our old master, Mr. A. Cooper. The protruded portion had acquired a dark red colour, approaching that of chocolate; but gangrene not having as yet commenced, it was returned within the abdomen, and after having passed my finger around the edge of the mouth of the sack, without discovering any adhesion, the parts were laid together, and the integuments retained with three sutures, adhesive plaster, pledgets, and a T bandage. In about two hours and a half after the operation, he took one ounce of castor oil.

Second day of the operation, Wednesday. The castor oil opened his bowels last night; he slept for several hours, and feels better. His abdomen is less tense and painful on pressure, and his tongue is moist. There is nevertheless considerable fever; his cheeks are flushed, and he complains of pain in the hypogastric and right iliac regions. Directed him an effervescent draught every two hours, and a strictly antiphlogistic diet.

Third day, Thursday. He had an almost innumerable number of stools yesterday, but found himself relieved and lighter after every evacuation; the fever and restlessness abated in the afternoon, and he slept soundly during the greater part of the night; his tongue is still much furred and brown, but it continues moist; and his pulse, still accelerated in frequency, and fuller than natural, has not that contracted hardness in it that yesterday distinguished it.

Fourth day, Friday. He had two motions yesterday, and feels so much better this morning, that he craves more substantial food than that allowed him; but his abdomen is again tense; the lower extremities of an icy coldness, and every

now and then he has an eructation from the stomach; his pulse likewise is more quick and frequent than it has been. On examining the wound, the plasters, from want of adhesive quality, had given away; they were therefore renewed, and the sutures removed. I directed also a flannel bag, filled with bruised chamomile flowers, to be frequently warmed, and sprinkled with spirits of camphor, to be applied to his abdomen; and his feet to be kept warm by hot and steaming bricks.

Fifth day, Saturday. Pulse is full and soft, and less frequent: his countenance has not that sallow and sinking appearance, nor is his abdomen equally tense, or the extremities as cold as they were yesterday; his appetite still exceeds his allowance, and in order to satiate it, he escaped the vigilance of the loblolly, and left his cot several times in search of food; had no alvine evacuation since Thursday. Directed an injection to be given him, with sulphate of soda and castor oil in it; he is likewise to continue the bricks and chamomile flower bag, and is to have some beef tea, in addition to gruel, sago, &c. and mucilaginous drinks.

Sixth day, Sunday. The injection of yesterday morning was repeated in the evening, but he had no fæcal evacuation before four o'clock this morning, and since that he had another at nine o'clock. The abdomen continues still tense in some degree, and the circulation in the lower extremities is yet feeble, although his pulse, as to frequency, force, and regularity, is perfectly natural. The wound does not look as favourable as it did on Friday; the lips are much thickened, inflamed, and separated; the surface has a sloughy appearance, and there is a good deal of hardness extending to some distance all along the incision. Laid aside the adhesive plasters, and applied emollient cataplasms.

Seventh day, Monday. Had two more motions since yesterday morning; but the tension of the abdomen does not yet entirely subside, and his pulse is much fuller than it was yesterday. Ordered him one wine-glass full, every three hours, of a mixture, prepared of ten grains James's fever powder, and eight ounces mint-water; and the inflammation about the wound requires the continuance of cataplasms and fomentations.

Eighth day, Tuesday. Two doses of the antimonial mixture excited the bowels sufficiently to discontinue it. The increased action of the pulse is reduced to a state below the natural standard; and no unfavourable symptom presenting itself, that would augur it an untoward indication, it appears more congenial to his present condition.

Ninth day, Wednesday. His bowels are kept soluble by occasional and small doses of the antimonial mixture; and the tension of the abdomen abates very visibly. The inflammation also of the wound is on the decrease, and a well defined line marks the extent of the sloughing, which is nevertheless very superficial.

Tenth day, Thursday. The sloughs are separating, and he promises in every respect favourably.

After this the rising granulations were dressed with dry lint, and the whole surface of the wound covered with a pledgit of simple ointment. Adhesive plasters were next employed to draw the edges of the ulcer nearer together. On the 19th day of the operation, I applied a truss, midway between the anterior superior spinous process of the ileum and pubis, and in eight days more, the wound cicatrized, and he was allowed to go to light duty.

#### OBSERVATIONS.

This man, whether from a morbid gastric secretion, or from habit, was a glutton; and, as far as I could learn, he had never before been sensible of any enlargement in the groin, until the morning of reporting himself, when he had monopolized the breakfast of two of his messmates, besides eating his own; and these circumstances in part account for the preference of purgatives, in the after treatment, to repeated blood-letting.

The violent antiperistaltic motion of the intestinal canal, together with the over distension it had suffered from crudities and from flatus, made it questionable with me, whether the tension and tenderness of the abdomen, after the operation, and the protracted constitutional commotion, proceeded entirely from peritoneal inflammation; and I have been induced to believe, that the increased irritability of the intestines from distension, rendered them more excitable to the performance of their natural functions, and particularly to the stimulus of the cathartics, and continued that tumefaction and soreness on pressure, which generally attend and succeed the most simple flatulent colic, where no inflammation is suspected to have supervened. The symptoms of the case, as I found it, will make it unnecessary in me to apologize for the omission of the warm bath, and for the neglect of an attempt to reduce the hernia by the taxis. The last method was altogether inadmissible, from the inflamed and painful state of the tumour; and the bath I conceived inferior to some of the means that had been already employed, in order to produce relaxation, independently of the objections that arose in my mind from loss of time, and the inconveniency and awkwardness that attends its use on shipboard, when not supplied with the proper apparatus.

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### V.

Account of an Epidemic Disease which lately prevailed in upper St. John's Parish, in South Carolina; by Dr. James Macbride. Communicated to Dr. David Hosack, by Thomas G. Prioleau, M. D.

EARLY in the spring of 1808, nearly coeval with the disappearance of the influenza, there occurred, in upper St. John's parish, among negroes, some cases of typhus fever, of uncommon duration, and exhibiting unusual symptoms. At first these cases were few, and appeared to be confined to two or three plantations only; but as the season advanced, the disease extended itself, so that in July it was considered epidemic to a tract of country, embracing the greatest portion of the parishes of St. John and St. Stephen. This fever, which I consider to have been a variety of the typhus gravior of systematic writers, was very uniform in its aspects, from June to the succeeding October, when it became complicated withpains in the chest, and cough; and though these symptoms predominated in almost every case after the setting in of winter, the grade of fever remained evidently the same.

This form of disease prevailed in the above mentioned tract of country for two succeeding winters, to the almost entire exclusion of pneumonia vera. The experienced practitioner need hardly be told, that its effects were often fatal, and its treatment embarrassing. Those who became my patients, appeared to have laboured, for the first three or four days of their illness, under a fever of the common intermittent or remittent form, the paroxysms of which were preceded by chills, and attended by great prostration of strength, and severe pains in the head, back, loins, and umbilical region; to these suc-

ceeded, on the third, fifth, or seventh day, pains in the chest, and a dry distressing cough. These last named symptoms declared the disease to be formed; and it was not till after their appearance, and frequently after the use of depleting remedies, that my services were required. The pulse was peculiarly feeble, and often irregular and intermittent; exacerbation of fever rendered it more frequent, sometimes fuller, but never tense. On my first acquaintance with this disease, I was frequently deceived by the fullness of the pulse, produced by increase of fever, and felt authorized to let blood; but on raising my patient up, the pulse would immediately sink. Those conversant with an epidemic find, I presume, a diagnostic peculiarity in the pulse, which they cannot well express through the medium of language; in that of which I speak, the pulse was an immediate source of discrimination; it gave the impression of a disease of extreme debility.

The tongue was, in most cases, covered by a dark brown crust; its edges were of a fiery red; in the morning it was moistened by a viscid mucus; at night it was so dry as to render speech indistinct: frequently, when the patient made attempts to protrude it for examination, it cracked transversely and bled; when protruded, it was in a constant tremor, and what may appear remarkable, the patient, in numerous instances, would not retract it until repeatedly and loudly admonished to do so. In convalence, the fur or crust cleared away first in the middle, and left the tongue marked for some time by two dark longitudinal streaks. In a few cases, the tongue wore a red and glossy surface; and I had occasion to observe, that this appearance marked cases of greater violence and shorter duration; the fauces were red, often apthous, and the teeth covered by a dark crust; the skin was ever hot and dry, but peculiarly so at night. To induce perspiration, by diaphoretics and the use of the warm bath, was often attempted, but scarcely ever with success. In two cases, where I

drew blood on my first visit, with the hope of raising the pulse, a most profuse perspiration, during the flow of blood, suddenly covered the body, but did not prove critical.

I did not observe, that either costiveness or a disposition to looseness characterized the state of the bowels; but in the typhus of the preceding summer, a violent diarrhea was a frequent, and often a fatal occurrence. The stomach was seldom or never affected by nausea, indeed it seemed to lose its excitability to those articles which are employed as emetics, for ipecacuanha and others of that class would prove sufficiently emetic in the forming stage of the disease, but if exhibited afterwards, they generally passed off by stool. Green or dark coloured, and highly offensive stools, were usually procured by cathartics.

Delirium was not a common symptom; in many fatal cases it was never observed, yet the intellectual faculties were evidently blunted; the patient seemed slow to apprehend your meaning; it was necessary to repeat your questions often, and slowly, before you received a reply. Those in whom the chest affection predominated less, and the disease approached nearer to pure typhus, complained much of noise in the head, and deafness. Difficulty of hearing, and impaired vision, were long attendants on several who recovered.

The pains in the chest were fugitive, and could not often be distinctly pointed out; under the clavicles they were first felt, and then, in turn, they seemed to invade every part of the thorax, and often the shoulders. The cough was dry, and so distressing at night, as to exclude rest altogether; it was accompanied by little or no expectoration, except in the morning, when a viscid and frothy mucus was with difficulty thrown off. In a few instances only did I find it streaked with blood. In two old persons, expectoration was rather profuse, of the consistence of saliva, and deeply tinged with yellow. Respiration was seldom laborious or oppressed. The exacer-

bations of fever were, in some measure, agreeable to the double tertian type; but, in many cases, it was impossible to make any discrimination of this nature; an increase of fever about dark, and an imperfect remission after four in the morning, were alone to be observed.

No disease seemed so little under the influence of critical days as this, after it was formed; nor could the physician ever speak with any certainty of prognosis, crisis, or even convalescence. Its duration was extraordinary; those who recovered were seldom free from cough and fever, under five or six weeks, and debility and emaciation were protracted to a much longer period: some died within a week from the attack of the disease, and others after the thirtieth day.

The expression of pain was generally marked on the countenance; but no complaints were made, not even that of thirst, after the complete formation of the disease; previous to this period, however, much pain was expressed.

A sudden change in the temperature of the atmosphere, from heat to cold, exerted a baneful influence over persons in every stage of this disease; in those recently attacked, it hastened the invasion of the pulmonary affection, and blasted the hopes which had been entertained of the convalescence of those who had suffered long. In the forenoon of a warm and calm day, I have left my patient sitting up, with a brightened countenance, and taking food with an apparent relish; when the sudden springing up of a northeast wind, and consequent bad weather, would consign him to the grave before twenty-four hours could elapse. More died in the months of March and April, 1809, than during the whole period of its prevalence.

Those who appeared most liable to the attacks of this disease, were field negroes, from the age of twelve to forty; and though fatality seemed the more certain in proportion to the advancement of age, yet the most youthful were victims.

Among white people of the lowest class, I met with cases of this disease, precisely similar to its appearance among the blacks; but, in persons accustomed to a generous diet, the disease wore a different aspect, partaking little or none of the chest affection. A case of the latter denomination terminated fatally on the seventh day; the first source of complaint was a violent pain in the left hip, with a slight fever; a few hours before death the body was covered with livid blotches.

When an individual of a family was attacked by this disease, it was expected that every member of it would sooner or later become sufferers, nor was this expectation often fallacious; in several instances I saw it prevail for months under the same roof, while an adjacent family, a few yards distant, were entirely exempt. In like manner some planting establishments suffered greatly, while others in view did not furnish a case. In the typhus of the preceding summer, this trait in the progress of the disease was more strikingly exemplified.

For obvious reasons, I do not intend to detail here, the mode, or rather modes of treatment, I pursued in this disease, during the first winter of its appearance; I had too often the mortification of seeing my exertions prove unavailing. The disease, when once formed, ran its course unmolested; its morbid associations were so strongly catenated, and the system rendered so inexcitable, that medicines, even the strongest stimuli, did not produce their usual effects. When my patients did recover, I could not often congratulate myself that my prescriptions had been very instrumental.

In one of the last cases of unmixed typhus, which occurred in the autumn of 1808, I employed the cold affusion, for the first time in my life, agreeably to the principles established by Dr. Currie of Liverpool, and though the case seemed so desperate as to exclude every ray of hope, the speediest and happiest advantages were derived. I had scarcely felicitated myself in the prospect of now being able to combat typhus

more advantageously, when the chest affection appeared. During the disheartening and embarrassing scenes of the succeeding winter, when feeling the low and frequent pulse, and the hot and dry skin of my patient, the idea of the employment of the cold affusion often recurred to me; but no precedent for its use, where the chest was affected, offered; I say no medical precedent offered, for Dr. Currie merely suggests his belief, that the objections to the use of the cold affusion, in pleuritis and peripneumonia, were not insurmountable; but adds, that his experience neither invalidates nor strengthens this opinion. To establish its validity the following cases are recited:

On the 5th of May, 1809, I visited a negro man of twenty-five years of age, in the seventh day of an illness, which I readily recognized to be the same with that I have above described. His pulse was feeble and frequent; his skin hot and dry; his tongue and his teeth covered by dark inspissated mucus; he was coughing incessantly without expectorating. His disease had been considered pleurisy, and had been treated as such; he had been twice blooded; often blistered; he had taken cathartics, and I found him taking decocrad. senekæ with vin. antimon. He was in a state of extreme debility, and delirious at night.

I recommended that he should have, during the remission of his fever, which was not very distinct, a decoction of Peruvian bark, eupatorium rotundifolium, and seneka, with elixir of vitriol; also, a moderate portion of Madeira wine, and as much fluid nourishment as he could take. At bed time, he was to have ipecacuanha, and tinct. thebaic, in due proportion; pediluvium, and spt. sal. ammon. vol. was directed to be given every third hour, in doses of twenty drops; and each dose was to be followed by a draught of warm wine whey. Due attention was paid to his bowels, which, previous to my visit, were too loose.

From business, and the distance of my place of residence, I was prevented from seeing my patient until the evening of the 7th of May; he was worse: he seemed weaker; his speech was so indistinct I could not understand him; every movement he made was attended by tremors; his skin was burning hot, and the cough, though not worse, was extremely distressing; in short, I had every reason to believe that my patient would soon fall a victim to the disease, unless some vigorous and successful effort could be speedily made to promote a crisis. The application of cold, in my view, appeared most likely to effect this purpose, and its use was resolved upon. A sheet was dipped in the coldest water that could be procured, and agitated in the air by two persons, to render it still cooler, and suddenly wrapped around the patient, who lay naked, for he was unable to sit up. As soon as the first sheet had lost its coldness, another was prepared, and applied in like manner. The patient expressed great pleasure at the application, although he had been apparently delirious just before, and desired its repetition; he was gratified until he began to shiver, when he was rubbed dry by warm woollens, and wrapped up warm.

A profuse perspiration immediately broke out; he expectorated freely, which he had never done before, and fell into a profound sleep. The applications had been made at dark, or a little after, when his skin was hottest; about midnight he grew hot and restless, and the cough became dry and trouble-some; the application of cold was repeated, and followed by effects equally salutary. On the day following he was so much better, that my services were no longer required. I was afterwards informed by the intelligent nurse of the plantation, that on the two succeeding nights the fever rose about dark, but that a single sheet relieved him each time. The following cases render it probable, that the cold affusion would have proved highly beneficial in many cases of this disease, which occurred

during the winter; but in none had so many causes concurred leading to the adoption of it, as in that just recited; some were of a peculiar nature, not arising from the case alone, but tending to soften the imputation of temerity, which I must have incurred had the case proved fatal.

I saw no more cases of this malignant peripneumonia this spring; typhus again appeared, and prevailed unmixed, until the succeeding November. I should remark, that the epidemical constitution of the summer of 1809, varied so much from that of 1808, that the fatal diarrhæa alluded to above, and which might have been an obstacle to the employment of the cold affusion, was not attendant on the cases of nervous fever which I saw this summer. I employed this remedy in every case where it was admissible, and every application enhanced my opinion of its efficacy.

On the evening of the 26th of November, while visiting a convalescent case of typhus, in a negro boy, I was requested to see his mother, aged fifty, who had been his nurse. I found her, and another son of twenty-five or thirty years of age, in the same room, and both in the third day of their illness. From the pulse, tongue, pains in the chest, and cough, I recognized the disease of last winter, and no milder in its appearance. The prominent features of each of these cases were the same, except that the woman referred her pains to the shoulders, and space between them, rather than to the chest; the man his, to his chest and back. They had each taken ipecacuanha and antimonial wine, which had produced, to a sufficient extent. effects both emetic and cathartic. The man being robust. and having often been the subject of pleuritis, of a form which required the lancet to a great extent, I drew from his arm about eight ounces of blood; the blood was of an arterial appearance, and I should have said it exhibited the same last

The third and fourth days passed away without any alleviation, but with an aggravation of their sufferings. Blisters had been applied; decoction of serpentaria, with antimonial wine, warm diluent drinks, pediluvia, &c. &c. had been prescribed and administered; but, notwithstanding, it appeared altogether probable, that these cases would run the same fatal course I had so often witnessed last winter. On the morning of the fifth day of their disease, in the exacerbation of fever, when the pulse was feeble and frequent, the skin hot and dry, and the cough incessant and dry, I had cold applied to both, in the same manner as related in the foregoing case, and effects equally desirable were produced. A more violent fit of coughing immediately succeeded the application of cold, but as soon as perspiration appeared, which it did profusely, and for the first time since my attendance, expectoration became free, and the cough was relieved. Towards midnight the man became hot and restless, when the application was repeated with great advantage. On the morning of the sixth day of their illness, I took my leave, having recommended a tonic plan.

The man was hurried on to greater debility by loss of blood; his pulse did not warrant it as much as I could have wished. To evince the efficacy and safety of the cold affusion in the latter stages of pleurisy, when the inflammatory symptoms have yielded to those of an opposite diathesis, the following case, of recent occurrence, is related:

December 9th, 1811, I visited a negro boy of seven years of age, who had been attacked, three days before, by a violent catarrh, accompanied by fever. The disease had now extended itself to the chest; a fixed pain was pointed out; he had a violent cough, producing froth streaked with blood, and was unable to rest; his pulse was tense; his tongue furred, white, with red edges, and his skin was alternately moist and dry, hot and cold. I immediately let blood, in quantity adapted to the age of my patient, and it shewed the inflamma-

tory crust. I then prescribed an emetic of ipecacuanha and antimonial wine, which was to be succeeded by a blister, and a purgative of pulv. antimonialis, cream of tartar, and jalap, if necessary.

December 10th. My patient was much better; I prescribed a decoction of seneka and antimonial wine, and I was not called upon until the 12th of December, when I found that the child had, during the last night, experienced a recurrence of its former symptoms; but the pulse had lost its tension, it was more frequent, and the cough was dry. A blister was applied, and an emetic recommended.

On the evening of the 13th December, I saw my patient. The emetic and blister had produced no permanent advantage, and I considered the case a very unpromising one. Respiration was not so free as to leave me without some doubt as to the propriety of the use of the cold affusion; but relying on the well known sympathy which subsists between the internal surface of the lungs and the skin, and feeling assured, by former experience, and from the present state of the skin of my patient, that profuse perspiration would immediately follow the use of the cold affusion, I resolved on the application of it. I had the child stripped, brought without the doors, and emptied over it a pailful of cold water; it was immediately rubbed dry, and covered up warm.\* Difficulty of breathing followed the application, but in a few moments, profuse per-

<sup>\*</sup> In March, 1810, I prescribed the cold affusion, in the case of a boy of fifteen, years of age, with the malignant peripneumony. The application was made just after dark; perspiration and other beneficial effects were produced, and on leaving my patient, I directed the nurse, who was more stupid than I suspected, to repeat the application about midnight, should be grow restless and hot, but not to do it unless the skin was very dry. About twelve o'clock, the application was made, when the skin was moist; an alarming oppression was the consequence; I was called up, and procured relief by the exhibition of an emetic.

spiration ensued, and a mouthful of viscid mucus was expectorated at one effort; the lungs were soon relieved; the skin continued moist. But one visit was paid afterwards.

St. Stephen's Parish, S. C. 30th April, 1312.

## VI.

TABULAR VIEWS of the altitudes of the most elevated Mountains in several districts of the United States; drawn up from Barometrical and Thermometrical Observations made by Capt. Alden Partridge, of the Corps of Engineers, Professor of Mathematics in the Military Academy at West-Point, &c. Communicated to the Editors by Col. J. Williams, President of the United States Military Philosophical Society, &c. &c.

Gentlemen,

Capt. Partridge, of the corps of engineers, has communicated to the United States Military Philosophical Society, the altitudes of the most elevated parts of the White and Green mountains in the state of New-Hampshire, which I enclose to you in the form of a table.

On a particular examination of his barometer, Capt. Partridge has found the graduations to be in French measure; the results in his former tables\* should therefore be corrected, by the addition of one fifteenth of the altitudes, which is the difference between the French and English inch nearly.† To put the whole in one point of view, I have corrected the former tables, which you have also enclosed.

I am, your obedient servant,

JONATHAN WILLIAMS.

New-York, May 1, 1812.

<sup>\*</sup> See the Register, vol. 1, p. 337, &c.

<sup>† 1</sup> inch French equal to 1.654 inch English.

The altitudes of the most elevated parts of the White and Green Mountains, in the state of New-Hampshire; calculated from barometrical observations, in the month of July, 1811.

## WHITE MOUNTAINS.

	ALTITUI	ALTITUDES IN FEET.	
NAMES.	above the sea.	above their bases	
Mount Washington,	6,600	4,712	
1st south of Mount Washi	ington, 5,693	3,805	
2d do. of do. d	o. 5,393	3,507	
3d do. of do. d	o. 5,190	3,302	
4th do. of do. d	o. 5,025	3,137	
5th do. of do. d	o. 4,646	2,758	
Base of the Mountains,	1,388	0,000	
GREEN	MOUNTAINS.	in a local firm	
Kellington Peak,	3,924	2,994	
Base of the Peak,	930	0,000	

Altitudes of some of the mountains in Virginia above the level of tide water.

1. The highest point of the Blue Ridge, near Rockpit Gap,	1,908
2. The foot of the Blue Ridge on the western side,	895
3. The summit of the first Mountain, near the Warm Springs,	2,018
4. The summit of the second Mountain, a near the Warm Springs,	2,380
5. The summit of the Alleghany Ridge, about six miles east of the Sweet Springs,	2,988

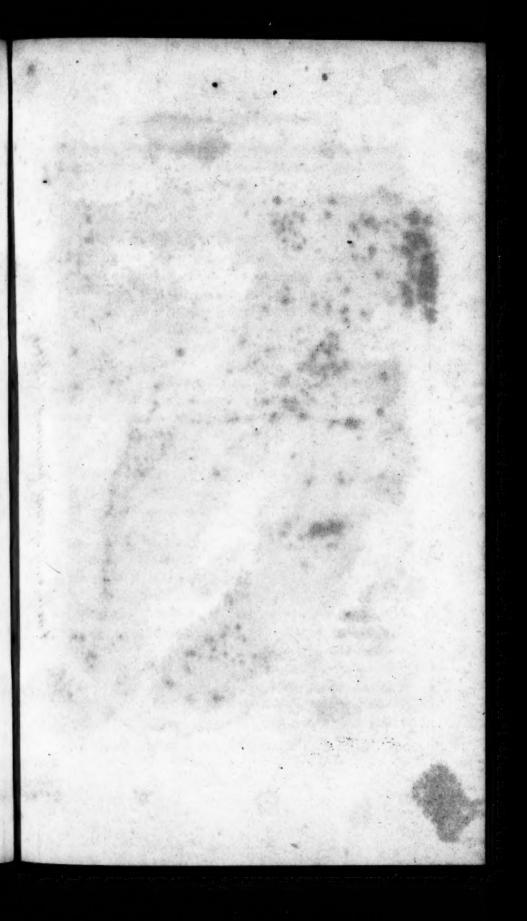
The altitudes of the highest Mountains at and near West-Point, state of New-York.

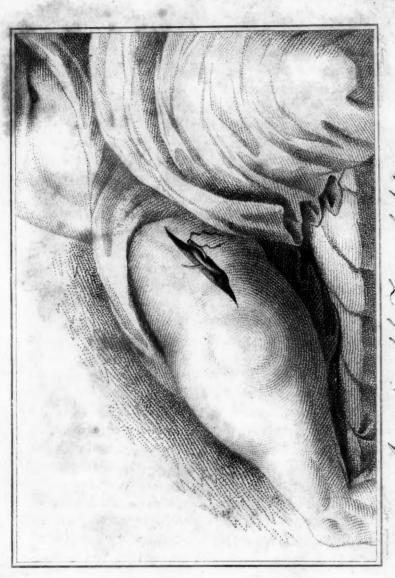
	ALTITUDES IN PEET.	
SANES.	above the sea.	above their bases.
Crows Nest,	1,418	0,000
Butter-hill,	1,527	0,000
Fort Putnam,	598	0,000
West-Point Plain,	188	0,000
Bull Hill,	1,484	0,000
Old Bacon,	1,471	0,000
New Bacon,	1,585	0,000
Anthony's Nose,	935	0,000
Sugar Loaf,	866	0,000
Break Neck Hill,	1,187	0,000

N. B. These mountains descend to the level of tide water on the North River; this therefore is considered as their base.

The altitudes of the most elevated Catskill Mountains, lying in the town of Windham, county of Greene, state of New-York.

	ALTITUDE IN PEET.	
NAMES.	above the sea.	above their bases.
Round Top,	3,804	3,105
High Peak,	3,718	3,019
Highest part of the turnpike,	2,425	1,736
Base of the Mountains,	699	0,000
Altitude of the round top above it	S	
own base,	1,653	0,000
Do. of the high peak do. do.	1,568	0,000
Whole altitude of the high falls,	330	0,000
Altitude of the first fall,	203	0,000
Do. of the second fall,	127	0,000





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## VII.

CASE of ANEURISM of the FEMORAL ARTERY: communicated in a letter to John Abernethy, Esq. F. R. S. Assistant Surgeon of the St. Bartholomen's Hospital, London, &c. from David Hosack, M. D. Professor of the Theory and Practice of Physic and Clinical Medicine in the University of New-York.

(With an Engraving, by Leney.)

Dear Sir,

It is a remark of one of the most distinguished surgeons of the present day, Mr. John Bell, "that in the operation for aneurism of the thigh, more perhaps have died than have survived it." In the manner of conducting the operation, there is also great difference of opinion, among the most celebrated surgeons of Europe. These facts render it necessary and proper to record every case in which this important operation has been performed, the manner in which it has been conducted, and the result of the case.

Influenced by these considerations, I enclose you the minutes of a case which fell under my care, during my attendance as one of the surgeons of the alms-house of this city, and which I am happy to add has terminated successfully.

John Spencer, a native of Germany, thirty years of age, came into the alms-house, about the twentieth of March, 1808, on account of a tumour of his right thigh, attended with pain and lameness, by which he was rendered incapable of pursuing his ordinary occupation, that of an oysterman.

Upon inquiring into the history of his complaint, it appeared, that his disease came on spontaneously about the first of February preceding; that he had sustained no previous injury

to which it could be ascribed, unless the circumstance of a waggon having passed over his thigh, about fourteen years ago, could be supposed to have had any agency in giving origin to The first symptom which he discovered of his complaint, was a small hard tumour about the middle of the thigh, which he perceived upon rising out of bed in the morning; in a few days, it evidently increased in size, and the pulsation became so considerable, that it was apparent to the bystanders. It then gave him no pain; but in about seven weeks from the time of its first appearance, the tumour became so large as to extend nearly to the knee, and almost as high as where the profunda leaves the femoral artery. It then produced a sense of numbness throughout the whole limb, and such a degree of pain in the part as deprived him of rest. The tumour also had acquired such magnitude, that, on the twenty-ninth of March, the pulsation was only to be perceived by the most attentive examination, and then only by grasping the tumour with both hands. The tumour also, at that time. assumed a somewhat purple colour, and, in one part, was much more elevated and elastic, and in some degree appeared as if the aneurismal sac would soon be ruptured. From its diffusing itself entirely around the thigh, there can be little doubt of a rupture of the coats of the artery. His health had become much impaired, his countenance pale, his pulse small and weak, and his extremities, excepting the part affected, much diminished in size, and his whole body considerably emaciated.

The nature of the disease being ascertained, and the tumour sensibly and daily increasing, a consultation was called the succeeding day, at which all present concurred in opinion, that the situation of the patient rendered it necessary that the operation should be performed as soon as possible. Accordingly, the following day, the 31st, was appointed for the operation. The patient's bowels were directed to be emptied by an injection, and afterwards an anodyne of one hundred drops of laudanum to be given him an hour before the time of operating.

In conducting the operation, Dr. Post, the Professor of Anatomy and Surgery, in Columbia College, gave me his assistance, by compressing the artery as it passed under Poupart's ligament; for the small space between the tumour and the groin did not allow of the application of the tourniquet. An incision was then made through the integuments, about six inches in length, in the direction of the sartorius muscle, at its inner edge, beginning about two inches from the groin. The sheath enclosing the muscle was then divided, and the muscle pressed aside. I then slowly divided the cellular membrane (scarcely to be called fascia) covering and enclosing the vessels; and with my fingers readily detached the artery from the vein and anterior crural nerve, and passed the needle probe with a strong double ligature beneath it. The ligatures were then tied, leaving about an inch between them, and the artery divided between the ligatures; but the division of it was made nearest the lower ligature, with a view to prevent the accident that has sometimes occurred, of the ligature being thrown off by the force of the artery. On this account particular attention was given to the manner of securing the artery. Great care was also taken not to separate it from its connexions, farther than was absolutely necessary to pass the probe beneath it and to apply the ligatures; lest any unnecessary separation should lessen the chance of union of the sides of the vessel before the ligatures might separate. In the hands of the English surgeons it has, in several instances, occurred, especially in those cases where the artery was left undivided, that ulceration took place, and the ligature separated before the sides of the vessel were united, in which case the patient was destroyed by hæmorrhage.

But by cutting the artery between the ligatures, as recommended by you and by Mr. John Bell, it retracts as after amputation; and its connexions being preserved, the union is as readily effected between the sides of the vessel in the one case as in the other. It may be proper here to remark, that the artery was secured about an inch above the tumour, which was left to be absorbed, and that the upper ligature was made so high that there was probably little more than half an inch between it and the profunda. Another circumstance worthy of notice is, that the pulsations of the artery near the tumour were unusually feeble; whereas the other vessels beat with their usual force, as also did the femoral artery, where it passes Poupart's ligament.

The artery being secured, the sides of the wound were brought together and retained by strips of adhesive plaster, covered with lint and a light compress, and the whole supported by a flannel roller; the patient was then conveyed to his bed, and his limb placed in an easy relaxed posture, with a pillow underneath his thigh to preserve it in that position. The next day a great increase of heat was perceived about the wound, but the lower part of the limb was much colder than natural, and not the least pulsation was perceivable in any of the arteries below the tumour. The limb was then bathed with spirits, and wrapped in warm dry flannels which were frequently renewed.

On the fifth day from the operation, the wound became somewhat offensive; the dressings were removed, when it was found that an adhesion had taken place the whole extent of the wound, excepting the part immediately adjacent to the ligatures. The limb was also considerably warmer than on the second or third day after the operation, but had not yet acquired its natural temperature. Having cleansed the parts first with soap and water, and afterwards bathed them with spirits, the plasters and compress were renewed, and the roller applied as before. The wound was from that time dressed

daily, and the whole limb washed with spirits: as early as the ninth day, the diminution of the tumour was apparent. On the 12th of April, i. e. the thirteenth since the operation, the ligatures came away; and on the seventeenth, a very feeble pulsation was perceived in the posterior tibial artery, and the limb was restored to its natural temperature. He was then put upon the use of bark and a nutritious diet. In a short time his general health was so much improved, that he walked about the house without the least pain or inconvenience. The tumour continued to decrease rapidly, and the wound healed without the least impediment of any sort.

The limb was still washed with spirits, and the roller applied as before, with the view to increase the tone of the parts, and to promote the absorption of the contents of the tumour.

The 22d of June following, he called to see me, with a request to be discharged from the alms-house, and to return to his business. He had entirely recovered his strength, the circulation appeared perfectly restored in the limb, and the tumour so inconsiderable, that upon measuring the circumference of the thigh, at the part where the tumour had been most apparent, there was but one inch difference between it and the corresponding part of the other limb. He was accordingly discharged, with the direction to lay aside the bandage, and daily, for some time, to bathe the part affected with cold water.

I am, dear Sir, with great respect and esteem, yours,
DAVID HOSACK.

[The man whose case is related above, again called upon me, a few months since, remaining in good health, and enjoying the perfect use of his limb. He informs me, that since the operation he has walked from this city to Philadelphia, and that his first day's journey was thirty-five miles.]

New-York, June 18th, 1812.

DH

## REVIEW.

ART. I. The HISTORY of the PLAGUE of ATHENS. By Dr. ELIHU H. SMITH. [From the New-York Medical Repository, vol. 1. 1798.]—Communicated by a Correspondent.

THE essay which we propose to examine, stands first in the pages of the Medical Repository, and was written to prove the domestic origin of the Athenian plague. The author entertained an opinion, that all epidemics have one common origin, and arise in circumstances nearly similar; and, for the purpose of fortifying this opinion, he had intended to write a series of essays, upon all the epidemics which have ever appeared: as the essay upon the plague of Athens is the only part of this magnificent design which has been finished, it may not be amiss to consider it as a specimen of all the rest, and, as such, to give it an attentive examination.

The performance of Dr. Smith is divided into two sections, the first of which contains a general account of Attica, stating the soil to be light and barren, the climate variable, the diet poor, the dress very warm in winter and very cool in summer, the horrors of domestic slavery somewhat softened, and the stagnant waters numerous. The city of Athens itself is described with much greater minuteness; not a quarter of any note, hardly a building of any consequence is omitted; and indeed this part of the section exhibits an unrivalled specimen of topographical accuracy, which none can justly appreciate, but those who remember, that the author not only describes a city which he never saw, but, as it was at an æra in which he never lived, thousands of years ago: when Pericles acted, and (what our author seems to have

overlooked) when Thucydides wrote. It only remains to observe, that, according to this new discovery, the city of Athens, far from being the capital of a refined and elegant people, was an habitation fit only for the vilest of mankind, the seat indeed of plague, pestilence, and famine, infested by wild beasts, offensive with putrefaction, and filled with every possible variety of wretchedness and misery. Let those who have associated other ideas with the remembrance of that famous city, no longer indulge the pleasing delusion, but sacrifice it instantly to this imperious truth; and if any have imagined Thucydides to be no less intimate with his native city than Mons. De Pauw, or the editors of the Medical Repository, let them learn their error, and discredit his partial assertions; "that owing to the greatness of their city, the Athenians enjoyed not only their own peculiar pleasures, but had easy access to the enjoyments and luxuries of all other men."\* And believe him still less, when he fondly declares, that by "private splendour and public amusements they blunted the sense of their calamities."† It is easy to account for this monstrous picture of the misery of Athens; for if the reader be not prepared to attribute substance and reality to this "phantasma, this hideous dream," and to esteem no scourge too dreadful for a place so loathsome, he cannot accede to the doctrine of our author. The section concludes with a remark upon "the relation apparently subsisting between the plague of Athens, and the state of the citizens as to vegetable supplies." This relation, "deemed by the author too curious and important to be lightly passed ever," is happily illustrated by a table, erroneous in the dates, which are the only parts in it of any importance; for, according to this table, the plague broke out in the spring, but, according to Thucydides, \*\* in the summer.

<sup>\*</sup> Lib.2. c. 38. † Ibid. 1 Med. Rep. v. 1. p. 18. || Med. Rep. v. 1 p. 18. \*\* Lib. 2. c. 47.

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Such, in point of accuracy and historic truth, is the first of these two sections. It will be scarcely necessary for us to state our belief, that this attempt to render probable the existence of local causes in Attica, is wholly unsuccessful; that it is ludicrous in the extreme for any man at this day to designate the position of every marsh, fen, and pool that surrounded a city, so many centuries ago, while not only the general face of nature is perpetually changing, but this particular city has undergone many vicissitudes, and been the prey of many different conquerors: particularly difficult would this attempt be to one who, in his very outset, complains of the want of evidence, and pathetically laments, "that few, even of the slender memorials that do exist," have ever been perused by him.

The second section commences with the following question: "Whether the plague was imported or of local origin?"\* And the essay goes on to state "that it indeed appears from Thucydides that a report prevailed in his time that the plague originated in Africa, and was imported into Athens. But from the manner in which this report is noticed by the historian, it may be inferred that the thought is entitled to very little regard." "Great stress," it is added, "is not to be laid on argument like this." This is certainly true, it merits not the slightest consideration, for if to mention cursorily be a proof of little regard, not to mention at all, must be a proof of total contempt, and there is not in Thucydides even a hint of domestic origin. Poor, however, as this argument is, it is yet stated in the most strong and favourable manner; for the Grecian historian does not say, in general terms, that the plague originated in Africa. Instead of naming this immense and unknown continent, he mentions

<sup>\*</sup> Med. Rep. v. 1. p. 19.

the particular districts, lays his hand on the spot, and thence following its progress, he treads in the very footsteps of the disease. Let him speak for himself:

"The plague, as it is said, began first in Æthiopia, back of Egypt; it then descended upon Egypt, Lybia, and a great part of the King of Persia's territories. But upon the city of the Athenians it fell suddenly; upon the Pyreus first; so that the Lacedemonians were suspected of having poisoned the wells, there being no spring at that place. Afterwards it came upon the city above, (Athens,) where the mortality was much greater."\*

This is something more than slight mention, something too detailed, too much dwelt upon, too minute for an unheeded report. Had he described the organization of an army in Æthiopia, composed of a nation unknown, their descent upon Egypt, their march through Lybia, and the territories of the Persian King; their embarkation and temporary disappearance, until the "sudden fall" of their victorious bands upon the sea-port of Athens, he could have used no other terms than those in which he has marked the origin and traced the progress of this fatal disease. Those who are familiar with Thucydides will, I think, have observed that in this part of his history, the two events in which he seems to have been most interested, are the siege of Platæa and the Plague of Athens. He has described both with a degree of particularity and detail very unusual with him; and, it may therefore, I trust, be safely presumed that he took more than common pains to acquaint himself with the facts. If he may be admitted to testify in his own cause, few will infer, with the writer in the Repository, that he thought his account entitled to "very little regard." "I have not thought proper, says

he, to relate the events of this war, as I might happen accidentally to hear them, nor even as they might appear to me to have happened, but with as much accuracy as lay in my power; I have investigated all, as well those at which I was present, as those which I took from others."\* At any rate, whether true or false, if cited at all he should have been cited correctly: where so much is to be collected from an author's manner, to dispose of his account by words of general import is uncandid, and perhaps to a very scrupulous man, aware of the importance of his subject to the lives and happiness of his fellow citizens, it might even seem to merit a much harsher epithet. What renders this proceeding more particularly suspicious is, that in this stage of the question, Thucydides and his countrymen are abandoned as persons who, though " eminently sagacious, cannot fairly be supposed to have considered this subject with philosophical precision." A plan is accordingly substituted, which unites both these advantages, exhibiting to the world a method of argument, at once eminently sagacious and philosophically precise. And this plan is " carefully to enumerate all the circumstances connected with this memorable calamity." + After pompously professing to rely principally upon the authority of Thucydides, is it not a little singular that this author should desert him at that nice moment, when his authority was most wanted? and substitute, in its place, a plan of his own, to which there are so many and so strong objections? Eighteen in number are these circumstances, and of one convert at least they may be sure, for the reasoner is pleased to give it as his decided opinion, "that a due consideration of them cannot fail to impress an entire conviction of the domestic origin of the Athenian plague."

Let the boasted efficacy of these circumstances be tried, without any terror at their number, or the confidence with which they are produced—

Telephus et Peleus, cum pauper et Exul uterque Projicit ampullas et sesquipedalia verba.

The first ten relate entirely to the peculiar situation of the city of Athens, and are from their very nature inapplicable to any other place. It follows, therefore, that where these causes did not exist, the plague would not have appeared. But according to Thucydides, (who describes the progress of the plague as he would the course of a ship,) "the plague is said to have touched at Lemnos and many other places."\* The consequence is not easily avoided; either the ten champions must be left to their fate, or the work of "entire conviction" must begin anew, and the island of Lemnos, though at a great distance, and in a different latitude, must be shown to be similarly situated to the city of Athens.

11th. Circumstance. "Like other epidemical diseases, the plague converted every thing into itself, or banished it during its own continuance."—This is confirmed by Thucydides.

12th. " It was fatal to domestic animals as well as men, and all wild animals shunned the city during its prevalence."

The above is asserted upon the authority of Thucydides, and we must express our astonishment, that any person acquainted with the passage, would imagine that the idea of a foreign origin was diregarded by the author. As translated by Mr. Hobbes, the passage in question is literally thus:

The State of State of

"For this was a kind of sickness which far surmounted all expression of words, and both exceeded human nature in the cruelty wherewith it handled each one, and appeared also otherwise to be none of those diseases that are bred among us, and that especially by this; for all, both birds and beasts, that use so to feed on human flesh, though many men lay abroad unburied, either come not at them, or tasting perished."\*

13th. "It affected the Athenians only when carried by their troops into other countries, and was never propagated into any other state than theirs, not even into the contiguous towns of Peloponnesus and Bœotia, notwithstanding the numerous rencounters of the hostile armies."

The above sentence contains three distinct and positive assertions, (not one of which is true) each tending to strengthen one conclusion, that the plague was not contagious, and could not therefore be imported. As this is a point, about which the assertions of this essay are very positive and dogmatic, we shall briefly state the reasons which induce us to be of opinion that the plague of Athens was a contagious disease. It is expressly so stated to be by Thucydides, I the author upon whom the Medical Repository principally relies. More Physicians died than of any other profession, because. says Thucydides, they were more exposed to the disease. If then the plague had been engendered in Attica, it would have seized upon all alike, and it never would have been a subject of particular remark that members of one profession died rather than of another. The plague first appeared in the Pyreus, T the sea-port of Athens; the Pyreus is four miles from Athens. Had

<sup>\*</sup> Hobbes' translation, quoted by Sprat. Johnson Poet. vol. 26. p. 234, 235.

<sup>7</sup> Med. Rep. vol. 1. p. 20. 1 Lib. 2. c. 51. 1 Lib. 2. c. 47. 1 Lib. 2. c. 48.

it not been contagious it would there have remained ; had it not been contagious, troops departing from Athens with the disease could never have infected others at a place so distant as Potidæa; and had its poison been incommunicable the animals that devoured the dead bodies would not have died.\* We return to the examination of the 13th circumstance. which, as we have stated, contains three senarate assertions. "It affected the Athenians only when carried by their troops into other countries." If this has any meaning, it probably means that there was something in the Athenian constitution that rendered them, and them alone, liable to the disease, in whatever part of the world they might happen to be. If this be the case, what becomes of the ten local causes so much insisted on? "And was never propagated into any other state than theirs, not even the contiguous towns of Peloponnesus and Bœotia." This the author allows to be against the authority of Plutarch, and the following passage shows that it is expressly contradicted by Thucydides. " Athenian troops were before the city of Potidæa; fresh troops under Agnon went from Athens to assist their countrymen in the reduction of that place; but they did not succeed, for the plague grievously afflicted them, and destroyed their army, so that those also who had been there before and in perfect health, took the disease from the soldiers under Agnon."+ Here is an instance of its propagation into another state, supported by his own witness, told in the plainest terms, reflecting back at once the charge of "absurd dogmatism," t where alone it is due, and vindicating the assertors of an imported contagion. The authority of Plutarch, we are informed, would in this particular have been disregarded, even if Thucydides had

<sup>\*</sup> Lib. 2. c. 58. vide ante, 2d. c. 50.

<sup>4</sup> Lib. 2. eap. 58.

<sup>4</sup> See Med. Rep. vol. 1. p. 19.

not elsewhere expressly asserted "that the plague was never propagated into the contiguous towns of Peloponnesus and Bœotia."

As Plutarch seems to be held in disgrace with the Medical Repository, it is perhaps unnecessary to say any thing in his favour, yet he is certainly entitled to all the advantage of a coincidence in opinion with Thucydides, who says, that the plague did not enter into the Peloponnesus in any degree worth relating, but raged principally at Athens, and in other places that were populous.\* And the towns of Peloponnesus and Bœotia escaped, "notwithstanding the numerous rencounters between hostile nations." Here let us pause.

In productions where among many things useful and important, some errors are discovered, it is not displeasing to cut them off and bring that which was good before, a step nearer perfection. In proportion, however, as these errors are numerous, this pleasure diminishes; and there is a point, at which the mind becomes weary, even of well doing, and sinks beneath the accumulated weight of fatigue and disgust. point is contained within the essay before us, wherein by a kind of fatality it happens that the pain of exposing error is never relieved by the pleasure of confirming truth. nations are at war, it usually happens that numerous rencounters do actually take place; yet at this period of the Peloponnesian war, not one single rencounter, skirmish, or battle was fought at land between the Athenians and their foes. error is the more astonishing, because the conduct of Pericles in restraining his countrymen from the field, during both the invasions of the Lacedemonians and their allies, forms, not only the most striking feature of his policy, but is particularly discussed and repeatedly mentioned in the history of Thu-

<sup>\*</sup> Lib. 2. c. 54.

<sup>†</sup> Med. Rep. 1, p. 21:

cydides, the principal reliance of Dr. Smith, in what he is pleased to term "a narration of facts."\*

The 14th convincing circumstance traces a resemblance "between the plague and the scurvy, a disease universally attributed to confinement, bad air, and a want of fresh provisions."

15th. There was always a decline of the plague when the harvest of the preceding year was spared, and the plague returned when the harvest of the preceding year was not spared.

There is nothing in Thucydides concerning these intermissions and returns of the plague, so scrupulously recorded in the Medical Repository, and it is to be regretted that no authority is cited in their support, unless indeed they are to be found in no other history than that which mentions the "numerous rencounters" before alluded to.

16th. The plague did not cease till after the incursions of the Peloponnesians were given over.

These incursions, (if the true historian be worthy of credit) were given over the sooner on account of the plague, reports of which were carried by deserters from Athens to the Peloponnesians. No inference can, however, be drawn from this, for it is more than probable that the fears of the Lacedemonian general, overpowering his reason, he retreated without taking time to consider the subject with philosophical precision.

17th and 18th. Indications of the sentiments of the Athenians; for they accused Pericles of having caused the plague by bringing together so many people; and, after the war, provided for future contingencies by building habitations for the country people.

<sup>\*</sup> In the 13th, 14th, 15th, 20th, 21st, 23d, and 55th caps. of the second book.

After having in another place deliberately rejected the opinion of the Athenians concerning the plague, it was rather unexpected to find them brought forward at this late hour, co-operating without any deduction in the difficult work of entire conviction.

Those who are acquainted with the history of the Athenians, well know the falsehood and the folly of their popular accusations. The banishment of Aristides, and the death of Socrates, might as well be regarded as evidences of their guilt, as this popular commotion an evidence "of the domestic origin of the Athenian plague." Yet let me add that it is not without its use; and if for nothing else, yet ought it to be remembered for this, that it affords an inimitable specimen of the sources of argument, and mode of reasoning upon which this author has in many instances relied, and by which he has fondly expected to produce universal conviction.

The account of this tumult by Thucydides, is simple and affecting. "After this second invasion of the Pelopomesians, the Athenians, when both their country was laid waste, and they themselves overwhelmed by the double horrors of pestilence and war, changed their minds, and held Pericles in displeasure as the advocate of the war, and the author of all their misfortunes; they determined to yield to the Lacedemonians, and sent ambassadors for that purpose; these were rejected; not knowing what to do in this extremity, they turned upon Pericles,"\* the first citizen in the republic, alike eminent for wisdom and valour, endowed with irresistible eloquence and unconquerable magnanimity, and whose counsels, if remembered, would have rescued his ungrateful countrymen from a foreign yoke.† The accusation of such a man

by such a people, and under such circumstances, is deemed a serious and impressive fact, from which important conclusions may be drawn. The number of those, we trust, is small who can mistake for the voice of reason, the ravings of a frantic populace; sick with hope deferred, confounded by accumulated disasters, and left without comfort or resource. One speech from Pericles, (an attentive perusal of which would have been profitable to the author in the Repository) silenced their false clamour, and, adds the historian, "soon after, as the people are wont to do, they choose him for their general, and committed all things to his care."\* Any conclusions, therefore, drawn from their accusation at first, must be completely overthrown by their conviction of its injustice at last. The eighteen circumstances have all been considered; many of them are triffing and inconclusive, but more of them incorrectly stated and unfounded.

The author of this paper is not a physician; and his principal design was to rescue a favourite author from merciless hands: whatever may be his success in this attempt, he can never regret the occasion, which has thrown in his way an act of retribution so just, as an exposure of the errors in fact, and fallacies in logic, which are conspicuous in the first essay of the Medical Repository.

\* Lib. 2. c. 65.

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ART. II. CASES of ORGANIC DISEASES OF THE HEART; with dissections and some remarks intended to point out the distinctive symptoms of these diseases. Read before the Counsellers of the Massachusetts Medical Society. By John E. Warren, M.D. Boston. T.B. Wait & Co. 8vo. pp. 61. 1809.

WE owe an apology to our readers, and particularly to the author of the work now before us, for having so long omitted to notice the present performance. Not that we believe. that any thing we could say would add to the value of his labours, or impress the public with sentiments of higher esteem as to their nature and utility; but as far as it is in our power to make known the results which have attended the investigations of Dr. Warren, so far, we think, an earlier notice of them might have been attended with greater advantages. It is altogether unnecessary for us to enter into a discussion on the importance of morbid anatomy, or to offer any thing in recommendation of it as a branch of medical study. It has long claimed the attention of many of the most distinguished authors; the progress which has been made in it is considerable; and its utility is daily more and more generally acknowledged. Researches too of this nature, when relating to the pathology of the human heart, seem to possess a peculiar interest; for though the structure and functions of this viscus in a sound state have been examined with greater success than perhaps those belonging to any other part of our system, yet it must be admitted that there are no diseases so little understood, and none which in the treatment are more frequently followed by disappointment, than those immediately connected with derangements of this organ.

These considerations of themselves must necessarily induce us not lightly to estimate the labours of those who attempt to dissipate the obscurity in which this subject is enveloped, and particularly the performance of Dr. Warren, which, in every respect, is entitled to the highest praise.

But there are other considerations which cannot but serve to enhance the value of the present essay. In this country a work exclusively on morbid anatomy is indeed a rarity; and if we except the examinations which have been made of individuals who have died of the vellow fever during its prevalence in different years, we scarcely recollect any thing that has been done to aid in the advancement of this branch of the We feel humbled while we make this declaration, a declaration by no means calculated to flatter our selflove, or to elevate our characters in the estimation of our medical brethren abroad. In justice, however, it must be admitted that popular prejudice in this country is so strong against the examination of bodies after death, as often to defeat the best wishes even of the few of our physicians who are competent to conduct investigations of this nature. This circumstance, though it may lessen the reproach which is bestowed upon us, does not altogether remove it. For had all who have enjoyed opportunities equal to our author embraced them with equal earnestness, and recorded with a like attention their researches, a body of useful information could not fail to have crowned their labours. But we can only wish that this had been the case: to have expected a different result during the low state of medical learning in our country, would have betrayed a credulity that could originate only from the greatest mental weakness. In these incidental reflections on the past, we are naturally induced to make a few remarks on the present and future state of our profession. As observations of this kind, however, would in some degree bere be misplaced, we shall enter more at length into an examination of this interesting subject in a subsequent part of the present number.

In the volume of Dr. Warren are detailed the histories of ten cases of diseases of the heart, which occupy about thirty pages; the remaining part of the work, of equal extent, contains a further illustration of these cases, and additional particulars relative to the 9th and 10th, as ascertained by dissection; together with some interesting observations on organic diseases of the heart in general. The first of the ten cases related, is that of Gov. Sullivan, the late chief magistrate of Massachusetts: it is most minutely detailed, and the most interesting. We abstain, however, from making any extracts from the present publication: to present the valuable part would be to transcribe the whole; and we wish not to diminish its circulation by lessening its originality. Every one who feels an interest in the subject on which it treats, will read it with satisfaction, and all who are gratified with the advancement of medical science in our country, will unite with us in our acknowledgments to Dr. Warren for his well directed labours.

ART. III. AMERICAN ORNITHOLOGY; or the Natural History of the Birds of the United States: illustrated with Plates engraved and coloured from original Drawings taken from Nature. By ALEXANDER WILSON. Philadelphia. Inskeep and Bradford. Imperial 4to. vol. iii. pp. 120. vol. iv. pp. 100. 1811.

Among the numerous attainments which adorn the human mind, the science of natural history has always held an elevated rank. The several departments of knowledge which it embraces, whether estimated according to their intrinsic importance, their influence in relation to the concerns and interests of common life, or the intellectual enjoyment they

afford, have been cultivated, though with unequal success, in all ages, and among all nations. A list of the learned and ingenious who have directed their labours towards the elucidation of natural history, would not suffer by comparison with that which might be produced in any other branch of human inquiry. In that particular department which relates to the history of the animal kingdom, the list of great names is indeed splendid, both for numbers and importance. In such a list would appear the names of Aristotle, (himself a host.) Linnæus, Ray, Buffon, Pennant, Edwards, Latham, Bonnet, and Shaw. We make these observations not that we think they present any thing new to the reader, but because they speak a language which cannot be misunderstood in fayour of a branch of science in general not duly appreciated. If the profound and comprehensive intellect of Aristotle thought itself worthily employed in composing the History of Animals, and the ardent and vigorous mind of Buffon was satisfied when he offered to the world his 'Histoire Naturelle,' the result of fifty years devotedness to study, what are we to think of the opinions of those who represent researches of this kind as beneath the dignity of science, and fit only to amuse the idle and the vulgar?

With sentiments strongly in favour of inquiries into the several departments of nature, and persuaded that they give peculiar pleasure to those who are thus employed, and add to the amount of rational happiness among mankind, we take up the present volumes. The former parts of the Ornithology, have already engaged our attention; and every lover of natural history will rejoice to hear that those now before us are worthy of occupying the same rank as their predecessors. In manner and in matter we recognize every excellence that gave such a lively interest to those which passed under our first review. [See Register, vol. 1. p. 96, &c.]

Mr. Wilson was directed to the study of nature by the impulse of native genius; and to gratify his ardent desire for-

natural knowledge, has zealously devoted the chief part of his life to a most interesting department of animated nature. A residence of nearly twenty years in this country, has afforded him opportunities superior to those ever enjoyed by any who have attempted the same subject. That he has availed himself of these, and to the fullest extent, is evinced in every page of these elegant volumes. If we advert to his descriptive talents as a writer, we find that he minutely and accurately records the haunts of the feathered tribe; their forms and colours, their food, the seasons of their migration, their manners, and every other distinguishing characteristic. That he is equally free from the technical terms of professed systematic writers, and those dry descriptions which have so much retarded the general diffusion of this science; and that while he evinces an ardent mind and brilliant imagination, he communicates all that he wishes to say in a style adapted to the comprehension of every capacity, and in a manner which cannot fail to allure the most inattentive reader. But in thus freely bestowing our decided approbation on the intellectual abilities of our author, as displayed in this masterly performance, let us not omit to notice that moral and religious character, which is every where so manifest in his writings. Accustomed to examine with the contemplative eye of the philosopher, the work of the great creator, he sees wisdom, and order, and benevolence in every part; and whether he directs his attention to the meanest and most humble, or most magnificent and exalted of his creatures, seems to hold 'converse with his providence.' In the exercise of his talents as a painter, he has left us nothing to wish. The drawings are mostly of the natural size, are copied and coloured from nature, and convey at the first glance, accurate and impressive ideas of the subjects they represent.

The following extract is taken from the account of the purple Grakle, the gracula quiscala of Linnaus, the crow black bird of Bartram.

"This noted depredator is well known to every careful farmer of the northern and middle states. About the 20th of March, the purple grakles visit Pennsylvania from the south, fly in loose flocks, frequent swamps and meadows, and follow in the furrows after the plough; their food at this season consisting of worms, grubs, and caterpillars, of which they destroy prodigious numbers, as if to recompense the husbandman before hand, for the havock they intend to make among his crops of Indian corn. Towards evening they retire to the nearest cedars and pine trees to roost; making a continual chattering as they fly along. On the tallest of these trees they generally build their nests in company, about the beginning or middle of April; sometimes ten or fifteen nests being on the same tree. One of these nests, taken from a high pine tree, is now before me. It measures full five inches in diameter within, and four in depth; is composed outwardly of mud, mixed with long stalks and roots of a knotty kind of grass, and lined with fine bent and horse hair.

"The eggs are five, of a bluish olive colour, marked with large spots and straggling streaks of black and dark brown, also with others of a fainter tinge. They rarely produce more than one brood in a season.

"The trees where these birds build, are often at no great distance from the farm house, and overlook the plantations. From thence they issue, in all directions, and with as much confidence, to make their daily depredations among the surrounding fields, as if the whole were intended for their use alone. Their chief attention, however, is directed to the Indian corn in all its progressive stages. As soon as the infant blade of this grain begins to make its appearance above ground, the grakles hail the welcome signal with screams of peculiar satisfaction, and without waiting for a formal invitation from the proprietor, descend on the fields and begin to pull up and regale themselves on the seed, scattering

the green blades around. While thus eagerly employed, the vengeance of the gun sometimes overtakes them; but these disasters are soon forgotten, and those

> ' — who live to get away, Return to steal, another day.'

"About the beginning of August, when the young ears are in their milky state, they are attacked with redoubled eagerness by the grakles and red-wings, in formidable and combined bodies. They descend like a blackening, sweeping tempest on the corn, dig off the external covering of twelve or fifteen coats of leaves, as dexterously as if done by the hand of man, and having laid bare the ear, leave little behind to the farmer but the cobs, and shrivelled skins that contained their favourite fare. I have seen fields of corn of many acres, where more than one half was thus ruined. Indeed the farmers in the immediate vicinity of the rivers Delaware and Schuylkill, generally allow one-fourth of this crop to the black birds, among whom our grakle comes in for his full share. During these depredations, the gun is making great havock among their numbers, which has no other effect on the survivors, than to send them to another field, or to another part of the same field. This system of plunder and retaliation continues until November, when towards the middle of that month they begin to sheer off towards the south. The lower parts of Virginia, North and South Carolina, and Georgia, are the winter residences of these flocks. Here numerous bodies, collecting together from all quarters of the interior and northern districts, and darkening the air with their numbers, sometimes form one congregated multitude of many hundred thousands. A few miles from the banks of the Roanoke, on the 20th of January, I met with one of those prodigious armies of grakles. They arose from the surrounding fields with a noise like thunder, and descending on the length of road before me, covered it and the fences completely with black, and when they again rose, and after a few evolutions descended on the skirts of the high timbered woods, at the same time destitute of leaves, they produced a most singular and striking effect; the

whole trees for a considerable extent, from the top to the lowest branches, seeming as if hung in mourning; their notes and screaming the meanwhile resembling the distant sound of a great cataract, but in more musical cadence, swelling and dying away on the ear, according to the fluctuation of the breeze. In Kentucky, and all along the Mississippi, from its junction with the Ohio to the Balize, I found a number of these birds, so that the purple grakle may be considered as a very general inhabitant of the territory of the United States.

" Every industrious farmer complains of the mischief committed on his corn by the crow blackbirds, as they are usually called; though were the same means used as with pigeons, to take them in clap nets, multitudes of them might thus be destroyed, and the products of them in markets, in some measure, indemnify him for their depredations. But they are most numerous and most destructive at a time when the various harvests of the husbandman demand all his attention, and all his hands to cut, cure, and take in; and so they escape with a few sweeps made among them by some of the younger boys with a gun; and by the gunners from the neighbouring towns and villages; and return from their winter quarters, sometimes early in March, to renew the like scenes over again. As some consolation, however, to the industrious cultivator, I can assure him, that were I placed in his situation, I should hesitate whether to consider these birds most as friends or enemies, as they are particularly destructive to almost all the noxious worms, grubs, and caterpillars that infest his fields, which were they allowed to multiply unmolested, would soon consume nine-tenths of all the productions of his labour, and desolate the country with the miseries of famine! Is not this another striking proof that the Deity has created nothing in vain; and that it is the duty of man, the lord of the creation, to avail himself of their usefulness, and guard against their bad effects as securely as possible, without indulging in the barbarous and even impious wish for their utter extermination?" vol. iii. p. 44-47.

In the following notice of the ivory-billed woodpecker, the picus principalis of Linnæus, the reader has a very favourable specimen of Mr. Wilson's abilities as a writer. Like an able biographer, he seizes hold of some striking circumstance or action, and by relating it faithfully, gives a much better idea of his hero, than pages of abstract description.

"This majestic and formidable species in strength and magnitude, stands at the head of the whole class of woodpeckers hitherto discovered. He may be called the king or chief of his tribe; and nature seems to have designed him a distinguished characteristic in the superb carmine crest and bill of polished ivory, with which she has ornamented him. His eye is brilliant and daring; and his whole frame so admirably adapted for his mode of life, and method of procuring subsistence, as to impress on the mind of the examiner the most reverential ideas of the creator. His manners have also a dignity in them superior to the common herd of woodpeckers. Trees, shrubbery, orchards, rails, fence posts, and old prostrate logs, are alike interesting to those, in their humble and indefatigable search for prey; but the royal hunter now before us, scorns the humility of such situations, and seeks the most towering trees of the forest; seeming particularly attached to those prodigious cypress swamps, whose crowded giant sons stretch their bare and blasted or moss-hung arms midway to the skies. In these almost inaccessible recesses, amid ruinous piles of impending timber, his trumpet-like note and loud strokes resound through the solitary savage wilds, of which he seems the sole lord and inbabitant. Wherever he frequents, he leaves numerous monuments of his industry behind him. We there see enormous pine trees with cartloads of bark lying around their roots, and chips of the trunk itself in such quantities as to suggest the idea that half a dozen of axe-men had been at work there for the whole morning. The body of the tree is also disfigured with such numerous and so large excavations, that one can hardly conceive it possible for the whole to be the work of a woodpecker. With such strength, and an apparatus so powerful, what havoc might he not commit, if numerous, on the most useful of our forest trees; and yet with all these appearances, and much of vulgar prejudice against him, it may fairly be questioned whether he is at all injurious; or at least whether his exertions do not contribute most powerfully to the protection of our timber. Examine closely the tree where he has been at work, and you will perceive that it is neither from motives of mischief nor amusement that he slices off the bark, or digs his way into the trunk. For the sound and healthy tree is not the least object of his attention. The diseased, infested with insects, and hastening to putrefaction, are his favourites; there the deadly crawling enemy have formed a lodgement between the bark and tender wood, to drink up the very vital part of the tree. It is the ravages of these vermin which the intelligent proprietor of the forest deplores as the sole perpetrators of the destruction of his timber. Would it be believed that the larvæ of an insect or fly, no larger than a grain of rice, should silently and in one season, destroy some thousand acres of pine trees, many of them from two to three feet diameter, and a hundred and fifty feet high! Yet whoever passes along the high road from Georgetown to Charleston, in South Carolina, about twenty miles from the former place, can have striking and melancholy proofs of this fact. In some places the whole woods, as far as you can see aroundy ou, are dead, stripped of the bark, their wintry-looking arms and bare trunks bleaching in the sun, and tumbling in ruins before every blast, presenting a frightful picture of desolation. And yet ignorance and prejudice stubbornly persist in directing their indignation against the bird now before us, the constant and mortal enemy of these very vermin, as if the hand that probed the wound to extract its cause, should be equally detested with that which inflicted it; or if the thief-catcher should be confounded with the thief. Until some effectual preventive or more complete mode of destruction can be devised against these insects and their larvæ, I would humbly suggest the propriety of protecting and receiving with proper feelings of gratitude, the services of this and the whole tribe of woodpeckers, letting the odium of guilt fall to its, proper owners.

"In looking over the accounts given of the ivory-billed woodpecker by the naturalists of Europe, I find it asserted that it inhabits from New Jersey to Mexico. I believe, however, that few of them are ever seen to the north of Virginia, and very few of them even in that state. The first place I observed this bird at, when on my way to the south, was about twelve miles north of Wilmington, in North Carolina. There I found the bird, from which the drawing of the figure in the plate was taken. This bird was only wounded slightly in the wing, and on being caught, uttered a loudly reiterated and most piteous note, exactly resembling the violent crying of a child; which terrified my horse so, as nearly to have cost me my life. It was distressing to hear it. I carried it with me in the chair under cover to Wilmington. In passing through the streets, its affecting cries surprised every one within hearing, particularly the females who hurried to the doors and windows with looks of alarm and anxiety. I drove on, and arriving at the piazza of the hotel where I intended to put up, the landlord came forward, and a number of other persons who happened to be there, all equally alarmed at what they heard; this was greatly increased by my asking whether he could furnish me with accommodations for myself and my baby. The man looked blank and foolish, while the others stared with still greater astonishment. After diverting myself for a minute or two at their expense, I drew my woodpecker from under the cover, and a general laugh took place. I took him up stairs and locked him up in my room. while I went to see my horse taken care of. In less than an hour I returned, and on opening the door he set up the same distressing shout, which now appeared to proceed from grief, that he had been discovered in his attempts at escape. He had mounted along the side of the window nearly as high as the ceiling, a little below which, he had begun to break through. The bird was covered with large pieces of plaster; the lath was exposed at least fifteen inches square, and a hole, large enough to admit the first opening to the weather-boards; so that in less than another hour he would certainly have succeeded in making his way through. I now tied a string round his leg, and fastening it to the table, again left him.

I wished to preserve his life, and had gone off in search of suitable food for him. As I reascended the stairs, I heard him again hard at work, and on entering, had the mortification to perceive, that he had almost entirely ruined the mahogany table to which he was fastened, and on which he had wreaked his whole vengeance. While engaged in taking the drawing, he cut me severely in several places, and on the whole, displayed such a noble and unconquerable spirit, that I was frequently tempted to restore him to his native wood. He lived with me nearly three days, but refused all sustenance, and I witnessed his death with regret." vol. iv. p. 20—23.

"The food of this bird consists, I believe, entirely of insects and their larvæ. The pileated woodpecker is suspected of sometimes tasting the Indian corn; the ivory-billed never. His common note repeated every three or four seconds, very much resembles the tone of a trumpet or the high note of a clarionet, and can plainly be distinguished at the distance of more than half a mile; seeming to be immediately at hand, though perhaps more than one hundred yards off. This it utters while mounting along the trunk or digging into it. At these times, it has a stately and novel appearance; and the note instantly attracts the notice of a stranger. Along the borders of the Savannah river, between Savannah and Augusta, I found them very frequently; but my horse no sooner heard their trumpet-like note, than remembering his former alarm, he became almost ungovernable." vol. iv. p. 24—25.

The ensuing extract, copied from the preface to the 4th volume, beautifully portrays the author's mind, and is equally becoming the philosopher and the christian.

"Is it possible for a rational and intelligent being, to contemplate these scenes without interest and without admiration? Innocence has charms that arrest almost every beholder, and can we survey the sportive and endearing manners of these with indifference? Men join with reverence in praises to the great creator, and can they listen with contempt to the melodious strains, the

hymns of praise which these joyful little creatures offer up every morning to the fountain of light and life? Who can contemplate, unmoved, the distress of a fond mother for her dying infant? And has that tender mother no claims on our sympathy, who, unprotected herself, prefers death rather than her young should suffer? Is tenderness of heart, fidelity, and parental affection, only lovely when they exist among men? Oh no! it is impossible!—those virtues that are esteemed the highest ornaments of our nature seem to be emanations from the Divinity himself; and may be traced in many of the humble and least regarded of his creatures." p. x.

But to conclude: the Ornithology of the United States, in which Mr. Wilson is engaged, exhibited in the manner of these volumes, is a magnificent undertaking, and calculated for the exercise of the greatest abilities. Fortunately for our country, it has fallen into the hands of one eminently qualified to execute it.

ART. IV. A COMPENDIUM of the theory and practice of MIDWIFERY: containing practical instructions for the management of women during pregnancy, in labour, and in childbed: calculated to correct the errors and improve the practice of midwives; as well as to serve as an introduction to this art, for students and young practitioners. Second edition, enlarged. By Samuel Bard, M. D. President of the College of Physicians and Surgeons of the University of New-York, &c. New-York. Collins & Co. 12mo. pp. 255. 1811.

THE first edition of the present Compendium made its appearance previously to the commencement of our labours: we have, therefore, little more to do than to announce that this second edition has been carefully corrected and revised

throughout, and that the venerable author has considerably enhanced its value by several important additions. The rapid sale with which the work has already been favoured, affords abundant evidence of the public estimation in which it is held, and renders any commendation of ours the less necessary. We cannot, however, but remark, that few if any have ever enjoyed a longer and greater share of practice in that branch of the profession to which the present volume relates, than Dr. Bard. Possessing in a high degree the talent to observe, and the ability to record in a style remarkable for its unaffected perspicuity, the results of his long experience. he has completed a work, which, though designed chiefly for the use of female practitioners in the country, who, it must be confessed, are in general remarkably ignorant and incompetent, is also richly deserving the attention of the medical student and the practitioner. A very important lesson inculcated in this little performance, relates to the use of instruments; the frequent employment of them, as formerly recommended by Smellie, and recently by Baudelocque, is very justly censured, and the resources of nature proved to be sufficient in nearly ninety-nine cases out of an hundred. Our author's account of the ample resources of nature, and his description of natural labour, and its several stages, are superior to any other that we have seen; and when we say this, we have in recollection the truly valuable volumes of Dr. Denman on the same subject.

### DOMESTIC INTELLIGENCE.

### Present State of Medical Science.

WE have on several occasions adverted to the state of Medical Science in this country, and have repeatedly inserted such facts and documents in the Register, as were calculated to gratify the wishes of those who feel an interest in the subject. In a former part of the present number, some few incidental remarks on the same topic were thrown out, and an intimation therein given that we should consider it more at length in another place. This we propose to do at this time; and, while we offer our opinions on a subject, the importance of which is universally acknowledged, we shall accompany them with such official reports, or articles of intelligence, as may be relied upon as authentic, and which will serve to elucidate what we may wish to make known. Every thing connected with the advancement of medical knowledge cannot fail to meet with a welcome reception, and the documents which we propose to insert from time to time, while they are perused by the general reader, will likewise serve as an aid to him who may wish to become acquainted with the medical history of the In expressing our thoughts on this important United States. subject, we shall always speak candidly and decidedly, and, we trust, we shall never be guided by any other motive than such as ought to influence every one who feels solicitous for the respectability and usefulness of a profession most intimately connected with the well being of society.

The great disparity in the merits of those who belong to the medical profession, is a topic of daily converse and public notoriety. As the high opinion which, in all ages, has been enter-

tained of the professors of the healing art, must have been founded, not upon any adventitious circumstances, but upon the very nature of the profession itself, and the abilities and acquirements of those who undertook to discharge its important duties, one seems naturally led to examine the merits and conduct of those who lay claim to a like consideration in the community, and to ascertain upon what grounds they assume a rank and importance among mankind, the reward only of commanding talents, severe application, and moral excellence.

That almost every district of our country abounds with individuals who set up to exercise the duties of practitioners of medicine, need scarcely be stated; how great is the number of them, who from the want of proper education, and from habits of indolence, are totally ignorant of the first principles of their profession, and who degrade the noblest of studies into the meanest of arts, cannot have escaped the attention of any who at all regard the interests of society. That characters of this description do abound, not in this or that particular city or district, but are to be met with in almost every part of the country, is a fact which no one, we presume, will have the hardihood to deny. Though they differ from beasts of prey, inasmuch as these are most generally found in the uninhabited wilds of the country, while those are most abundantly congregated in our largest and most populous cities; yet they wage war with equal success as it regards the destruction of their objects. So frequently, indeed, do they present themselves to our view, as almost to have become domesticated and familiar with us, and to have lost that novelty which monsters in general possess. The inroads and depredations which they commit, bid defiance to all calculation; whether they come in the natural shape of nostrum mongers and venders of infallible cures, or whether they assume a peculiar grimace and affected sapience, their touch is equally pestilential. The popular, but erroneous opinion,

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that there is no certainty in the science of medicine, and that it chiefly depends upon conjecture, emboldens their advances and facilitates their sordid and mercenary views. True it is that this lamentable state of things has not been the product of a day. As quackery is always found to prevail wherever there are knaves and fools to dupe and to be duped, we had early evidence of this species of dishonourable livelihood. As far back as the year 1753, the late historian of this state; speaking of the inhabitants of the city of New-York, observes: "Quacks abound like locusts in Egypt, and too many have recommended themselves to a full practice and profitable subsistence. This is the less to be wondered at, as the profession is under no kind of regulation. Loud as the call is. to our shame be it remembered, we have no law to protect the lives of the king's subjects from the mal-practices of pretenders. Any man at his pleasure sets up for physician, apothecary, and chirurgeon."\*

Notwithstanding the strong and forcible manner in which the historian expresses himself, his relation of what he saw in his own times, is no less true of what we ourselves daily witness. But since the period in which he wrote, the evil has rapidly increased, and has at length arrived at an alarming magnitude, and loudly demands the speedy application of some vigorous remedy. We trust our remarks convey no anjust imputations; our attachment and esteem for the profession, induce us to speak with earnestness. The necessity of something like medical reform is obvious, and the learned and the liberal in every quarter are called upon in behalf of so beneficial an undertaking. The degraded state of medical science renders necessary the united exertions of all, if we wish to restore the healing art to its wonted dignity. It were

<sup>\*</sup> History of the province of New-York. 4to p. 2122.

no less absurd to expect light to spring out of darkness, or the. salutary influence of the christian revelation to flow from the system of the Brahmins, than to expect that a science in itself liberal and dignified as that of medicine, should receive any support from the ignoble and the vulgar; that the complicated structure of the human frame and the pathology of disease. should be understood by men, who, from education, knowledge, and intellect, are fit only to discharge the duties of some menial office; that a profession, in the attainment of which, an expenditure of some wealth, and a long and severe application is required, should be comprehended by the indolent, and those whose attention is directed solely to the acquisition of money, and whose minds are as gross and heavy as the metal for which they toil. By a steady and fearless perseverance, we are persuaded that in no great length of time, the character of our profession will be rescued from the disgraceful condition to which it has been reduced. The means of producing these salutary changes, are within our reach, and let us strenuously employ them; let all who duly estimate the profession, co-operate in discountenancing impostors in every shape, and let them hold no communion with them; they are a class of beings who, of themselves, like mules and other hybrids, are providentially unable to improve their species. Let not the mere compounder of drugs, whose acquirements enable him to do little more than to distinguish rhubarb from bark, enjoy all the rights and immunities of regular college graduates; and as we deem it necessary that a series of years should be spent in order to handle the last and the awl, let us require, at least, an equal portion of time to be devoted to study, to qualify an individual for the exercise of those duties, upon a proper performance of which, the lives and happiness of his fellow creatures depend.

How, it may be asked, are these important objects to be attained? Nothing will so soon and so effectually accomplish

them, as a proper system of medical education rigidly enforced. Every youth, previous to his having engaged in a course of medical studies, should be properly qualified by a suitable preliminary education in classical and mathematical learning, and after having passed through a prescribed course of study in the several departments of medicine, he should be examined by competent characters in all the essential parts of the profession, and if found qualified, be allowed to matriculate as a practitioner. We say the essential parts of his profession, because we think it an error frequently committed in the examination of candidates for this honour, even in our regular medical establishments, that speculative and theoretical opinions are often too highly valued, and that practical knowledge is defrauded of its proper estimation. The only effectual way of affording our youth this kind of knowledge, which is the ultimate object of all their labours, is to impose upon them a proper attendance on the lectures of public teachers, on the clinical practice of our hospitals and other public charities; establishments, indispensable to our medical schools, and without which all efforts to instruct must prove abortive.

Another very important but too much neglected part of instruction, which should be embraced in a plan of medical education, relates to the conduct which ought to be pursued by medical men in their intercourse with each other, and with society at large.

A system of medical ethics must be taught and enforced, otherwise there is no security against those mean artifices to which some men resort to obtain professional business; for it is a lamentable truth, and we state it with reluctance, that individuals are occasionally to be found, who, though they be competent as practitioners, are remarkably wanting in all the essentials which constitute the gentleman. The profession is a liberal one; a liberal conduct ought to be pursued among its

members; and those who exercise its duties deserve to be supported. But we will not enlarge on this point, after the able manner in which the subject has been considered by the late Dr. Peter Middleton of this city. The following extract is taken from his *Medical Discourse*, and on the perusal of it, the reader will learn the opinions of a man learned and liberal in his profession, and whose life was a practical illustration of his doctrines. Perhaps he will also perceive, that Dr. Middleton speaks with feelings, the result of something more than observation:

"All the qualifications," says Dr. M. speaking of the character of the physician, "of the head and heart, becoming the character of a gentleman, are indispensably required to constitute the physician of merit, who would secure the esteem of his patients, do honour to himself, or support the dignity of his profession. If it is commendable in him to collect information from every one; he cannot surely, when consistent with the duty he owes himself, refuse to consult with other respectable practitioners, in every case of sickness, upon what can be done for the benefit of the patient. As the humane physician prefers the welfare of his patient, and his own success in practice, to every consideration which pride or avarice can suggest; he will not only with alacrity join in such consultations, when requested to it, but solicit them occasionally, as an indulgence and relief to himself: whereas a contrary conduct can only proceed from sordid motives, or the dread of having his ignorance or mal-practice exposed, to those who only can judge of them. He ought to be extremely cautious of decrying the advice or opinions of others, either by open censure, or private innuendos: the former too often proceeds from rusticity of manners; the latter always from interested views, or a dishonest heart. But the significant shrug, the solemn shake of the head, the affected stare of surprise, the studied silence of ill dissembled doubts; in short, the insidious show of good nature, the subtle and designing delicacy of those, who,

Willing to wound, but yet afraid to strike,

Just hint a fault, and hesitate dislike;

POPE.

are the mean arts of needy pilferers of fame, and of spirits poor indeed. To vaunt of extraordinary cures, before such as are not competent judges, or incapable of inquiring into the circumstances of them, may justly render the belief of them at least doubtful. An ostentation of learning in common discourse, even when his profession is the subject, is not always a proof of it; on the contrary, to be unable to convey his sentiments, without having recourse to numerous terms of art, is generally a proof of contracted ideas, and a narrow understanding. The man of real knowledge is generally modest, often diffident, always easy and happy in his choice of words, and never loquacious: while the self-sufficient pretender, like the babbling shallow stream, is ever noisy, froward, and petulant." p. 67.

But in these remarks on the low and degraded state of the medical profession, and on the manner in which we think the evil might be remedied, we happily have, in some degree, been anticipated by the measures which have recently been adopted by our legislature, aided by the liberal and enlightened policy of those who preside over the interests of learning in this state. In April, 1806, an act was passed by the legislature of New-York, for the incorporation of medical societies in the different counties of the state, for the purpose of regulating the practice of physic and surgery. This act may be considered as among the most important that has been made for the regulation of medical science. Institutions of this kind have accordingly been formed in a majority of the counties, and their beneficial effects have, in no few instances, already been experienced. In their organization,

however, evils of a very serious nature have been allowed to creep in; arising, as it appears to us, from defects in the act of their incorporation. The relative merits of candidates for admission to a seat in these societies were disregarded, and the hand of fellowship allowed to the illiterate and the vulgar, when it ought to have been reserved for the educated and the virtuous. We mean nothing personal in these remarks, and we hope it will not be considered, that we wish to do injustice to the members who compose these associations. Many of them, we know, are gentlemen of great moral worth and eminently skilled in their profession. But that these errors in the first formation of these associations, have materially affected their respectability and limited their usefulness, needs no microscopic observation to discover.

Another circumstance, the existence of which will scarcely be credited by those not connected with the medical profession, is, that the system of examination in these societies, however lax or severe it may be, is put in force only against those youth who receive their education among us. From them alone do we make any exactions. Every one who has at any time assumed the character of physician elsewhere than in our own state, is allowed the full enjoyment of all the privileges which belong to the profession. The door is open to all who feel disposed to enter, and no test of ability is required of them. It would seem that Dr. Middleton had written prophetically when he penned the following paragraph.

"Such being the state of physic here, what wonder is it that this city should be pestered in so remarkable a manner, with the needy outcasts of other places, in the character of doctors; or that this profession, of all others, should be the receptacle and common resource for the refuse of every other trade and employment? The wonder indeed is, that we should be such dupes to their effrontery, as to employ

them, or buy their pernicious compositions; not that they should frequent so beneficial a market. So amazingly easy of belief are some people in these miracle-mongers, that, as if there was something creative in the name of Doctor, seldom any other test of their skill is required, than their assuming that title: so that this appellation, with a competent presence of mind, and a string of ready coined cures, carefully propagated by such as find their account in carrying on the cheat, have seldom failed of procuring traffic in New-York. We are told that the university of Turin forbids itinerant doctors, to vend medicines, without a license from the professors of physic, under pain of death." p. 64.

We will not insult the understanding of the reader, by telling him that in this description, the necessity of reform

is strongly indicated.

Fortunately the solicitude of the legislature was not manifested merely in granting power to each county of the state for the organization of a medical society. Convinced that something still more effectual was required, in order to lessen the numerous abuses existing in medicine, the regents of the university deemed it expedient in the following year, 1807, to establish a College of Physicians and Surgeons, in this city, and the legislature, sensible of the benefits resulting to the community from such an establishment, sanctioned their enlarged views, by a liberal appropriation for its support. It may here be remarked, that full authority had been vested in the regents to organize a college to be exclusively devoted to the cultivation of medical science as early as 1791. That so many years elapsed before that learned body thought fit to exercise that power, appears to have been on account of the existence of the medical school attached to Columbia College; which it was hoped would in time supersede the necessity of another medical institution. How far the medical school of Columbia

College has been successful, or to what causes its failure is to be ascribed, are questions somewhat irrelevant to our present subject, and which we shall not now consider. Those who are desirous of further information, are referred to a late pamphlet on this subject.\*

The organization of the College of Physicians and Surgeons of this city, by the regents of the university, and its immediate sanction by an enlightened legislature, was a circumstance viewed with the greatest satisfaction, and afforded just cause of congratulation to the friends of science throughout the state. That the high expectations which were entertained of the benefits that would flow to the community from its establishment, are proved to have been well founded; the history of the college, during the few years it has been in operation, presents the most conclusive evidence.

It is upon institutions of this nature, upon well organized and liberally endowed colleges, devoted solely to the cultivation of the several branches of medical science, that reliance is to be placed. It is to these we are to look if ever we wish to rid society of those base and daring men, who appropriate to themselves the rewards due to the ingenuous, the unassuming, and the learned; and the enlightened policy of our rulers, as far as it has been directed to these institutions, cannot be too highly commended. But the salutary work is yet in its infancy. Our colleges must be invigorated by legislative munificence, as the only effectual means of rendering education cheap and accessible, and of furnishing a sufficient number of well educated practitioners for our country, our army, and our navy.

But not to enlarge upon a subject which seems to be duly appreciated by those best qualified to judge of its real im-

<sup>\*</sup> Observations on the establishment of the College of Physicians and Surgeons, in the city of New-York. By David Hosack, M. D. New-York, 1811. See also Dr. Hosack's Introductory Discourse. Register, vol. 2. p. 225.

portance. In a late report to the legislature of this state, the Hon. the Regents of the University have manifested their solicitude in behalf of an improved system of instruction, and a more extensive diffusion of medical knowledge; and it is highly satisfactory to observe the language they employ, when speaking of the Medical establishment under their own immediate care and protection, the College of Physicians and Surgeons of this city. The experience of all has universally proved that in a large and populous city only can an institution devoted to the purposes of medical instruction flourish; and, from the many and great advantages which the city of New-York affords, a place better calculated for the establishment and support of a great medical school is not to be found in the western hemisphere. May this institution, under the guidance of its venerable president, aided by the learning, abilities, and unwearied exertions of its professors, give fresh vigour to the drooping state of medical science, and spread its sanative influence through a diseased land; and may the wisdom which gave it being, long live to cherish and protect it. Mile had a representation

Legislature of the State of New-York.
In Assembly, May 23, 1812.

To the Honourable the Legislature: The Regents of the University respectfully report:

That the colleges and academies of the state continue to furnish favourable evidences of the increase of literature, and the beneficial effects of the patronage and fostering care of government.

Columbia College already experiences the advantages of the improved system\* recently digested and adopted by the trus-

<sup>\*</sup> Referring to the late improvements made in the Classical department of this institution.

tees, and they entertain the most flattering anticipations of its effects.

The prosperous state of Union College, proves that its liberal endowments have been properly bestowed.

The vast and rapidly increasing population of the western parts of the state, have induced the regents, on an application from a number of respectable citizens of the western district, and other sections of the state, together with the trustees of Hamilton Oneida Academy, to concede the incorporation of a college to that institution, on the condition that its funds be augmented to the amount of fifty thousand dollars; by which means it is believed that the benefits of a liberal education will be brought within the reach of numbers, who would otherwise, from necessity, remain destitute of it.

The organization of the College of Physicians and Surgeons has been improved, and it now presents a fair prospect of speedily rising to a state of usefulness and celebrity, such as may be justly expected from the importance of the community in which it is situated, and the government under whose auspices it has been erected.

A gentleman universally acknowledged among the first in the medical profession in America, has consented to be placed at the head of it, and professors of the best talents have been procured to deliver instruction in it.

As a means of rendering the usefulness of this establishment more extensive, especially among the citizens of the state, the trustees have suggested the measure of providing by law for the gratuitous instruction of a student from each county.

This measure is also recommended, and advocated with reasons that cannot fail to produce a conviction of its propriety, in an appendix to a discourse delivered at the opening of the last session of the Medical School, by the president, whose judgment on the subject is entitled to the high-

est confidence: the regents, therefore, cordially recommend it to the attention of the legislature. All which is respectfully submitted. By order of the Board,

DANIEL D. TOMPKINS,

Chancellor of the University.

Albany, May 27, 1812.

### SATURDAY, May 30, 1812.

Mr. Clark, from the joint committee of the senate and assembly, appointed to take into consideration the report of the regents of the university, reported as follows:

That the committee have taken into mature consideration the subjects contained in the said report of the regents, especially that part which relates to the gratuitous instruction of a student of medicine from each county of this state. The committee, on this subject, have been assisted by the judicious remarks of the enlightened and able gentleman who presides over the College of Physicians and Surgeons. The committee are unanimously of opinion, that such a diffusion of medical knowledge, as is proposed by the honourable regents, is of great public importance, and highly deserving of the patronage of an enlightened legislature. The committee have prepared a clause for that purpose, and directed their chairman to ask for leave to present the same, to be added to some proper bill.

Leave was given accordingly.

Medical Commencement in the University of New-York.

The annual Medical Commencement for the purpose of conferring the degree of Doctor in Medicine in the College of Physicians and Surgeons of this city, was held on Tuesday, the 5th of May, 1812. The honours of the College were publicly conferred by the venerable and learned president, Dr. Samuel Bard, in the presence of the Hon. the

Regents of the University, the Trustees, and other officers of that institution, &c. &c. The degree of Doctor in Medicine was granted to the following twenty gentlemen, eleven of whom were regular students of the College, had undergone the requisite examinations prescribed by its laws, and defended the respective inaugural dissertations annexed to their names.

ROBERT M. BARCLAY, A. B. of Orange county, N. Y .- " On Marsh Miasmata."

CHARLES DRAKE, of the city of New-York-" On the Proximate Cause of Inflammation."

GIDEON C. FORSYTH, of the city of New-York-" On the Blood."

James Fountain, of Westchester county, N. Y.—" On Ty-phus Fever."

JABEZ W. HUSTED, of Westchester county, N. Y.—" On Tetanus."

FREDERICK J. HILL, of North-Carolina-" On Gout."

RICHARD I. LUDLOW, of New-Jersey-" On Respiration."

Samuel Maxwell, of Montgomery county, N. Y.—" On the Transfusion of Blood."

ISAAC ROOSEVELT, A. B. of the city of New-York—"On Angina Pectoris."

DIRK G. SALOMONS, of St. Eustatia, W. 1.—" On Human Intestinal Worms."

DELOS WHITE, A. B. of Otsego county, N. Y .- " On Ul-

The honorary degree of Doctor in Medicine was conferred on the following gentlemen:

ALEXANDER SHELDEN, of the county of Montgomery.

JOHN STEARNS, of the city of Albany.

WESTEL WILLOUGHBY, Jun. of Herkimer county.

OLIVER C. COMSTOCK, of Schenectady county.

WILLIAM KIRKPATRICK, of Onondaga county.

Joseph White, of Cherry Valley, Otsego county.

DAVID BAILLIE WARDEN, American Consul at Paris.

ANDREW MORTON, of the city of New-York.

John Augustine Smith, Professor of Anatomy and Surgery

in the College of Physicians and Surgeons.

History of the Yellow Fever, which prevailed at Perth Amboy, (N. J.) in the summer of 1811, and of the evidences of its importation into that place.

We at length give place to the following report on the yellow fever, and the official proceedings of the Board of Health relative to the same. Our only apology for having so long delayed the publication of these interesting papers, is, that we have not had room for them before, the pages of the Register having been occupied with the favours of our numerous and highly respectable correspondents. In the publication of this statement, we shall only remark, that if the facts now given relative to the introduction of the yellow fever into the city of Amboy, do not carry conviction to the minds of all who peruse it, we may truly say, neither will they be persuaded, though one rose from the dead.

Board of Health of New-York, September 16, 1811. The Honourable DE WITT CLINTON, President.

Information having been given to the board that a dangerous, malignant, and infectious fever now prevails at the city of Amboy, in New-Jersey; it was resolved, that it be recommended to his honour the Mayor to issue his proclamation interdicting all communication between the said city of Amboy and this city.

Resolved also, that a committee be appointed to confer with the health officer at the quarantine ground, and obtain from him, and from such other sources as they shall judge advisable, information of the existence of the said disease, and other facts deemed necessary by them, and report with all convenient speed to this board.

Resolved, that the committee appointed, be Dr. Joseph Bayley, Dr. John H. Douglass, of this board, and Dr. David Hosack, of this city, and that the health officer, Dr. Rodgers, be associated with them.

### September 19, 1811.

The committee appointed to confer with the health officer, and to ascertain the facts respecting the disease prevailing at Amboy, presented the following report, which was approved, and ordered to be entered on the minutes.

Report of the Committee appointed by the Board of Health to investigate the nature and origin of the disease now prevailing at Perth-Amboy, New-Jersey; addressed to the President and Members of the Board:—

Gentlemen,

Agreeably to the instructions conveyed by the resolution of the Board of Health, we yesterday proceeded to Perth-Amboy, for the purpose of obtaining information relative to the nature and origin of the disease, at present prevailing in that city. The health officer, Dr. Rodgers, having been appointed, with us, a member of the committee, we waited on him, at Staten-Island, with the hope that as he had been at Amboy, and had seen some of those persons who had died of the disease, he would have had it in his power to furnish the information required, and perhaps rendered our visit at Amboy unnecessary; and in case he should not be in possession of the facts which would be expected by the Board of Health, to request him, as a member of the committee, to accompany us, for the purpose of making the necessary inquiries. Upon our arrival at the quarantine ground, we accordingly stated to the health officer, that information had been received by the Board of Health of the prevalence of an infectious disease at

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Perth-Amboy, which had excited considerable alarm among the citizens of New-York. That in consequence of this information, the mayor had thought it necessary to issue his proclamation, interdicting the communication between the two places; and that the Board of Health had appointed a committee, for the purpose of inquiring into the facts upon this subject: that Dr. Miller, the resident physician, had been requested by the board to be a member of the committee, but owing to unavoidable engagements, he had declined the appointment: that thereupon they considered it expedient to request the health officer to perform that duty, and understanding that he had already been at Amboy, and had expressed an opinion of the nature of the disease, they had been in expectation of receiving from him an official statement of the facts that were now sought for. Dr. Rodgers replied, "that he did not consider the Board as having any right to expect a communication from him relative to a fever at Amboy." We then observed, that as a constant communication existed between Amboy and New-York, and that as the disease might be conveyed to the latter city, they expected from him, as the sentinel at the out-post, every information in his power to communicate; and that by a resolution of the Board, they certainly did expect that he would also communicate to us the facts that had come to his knowledge. Dr. Rodgers then stated, "that when this disease might come under his purview at the quarantine ground, he should consider it his duty to make such communication, but not till then;" and added, "You had better, gentlemen, proceed to Amboy to seek information for yourselves;" that his duties did not permit him to accompany us; that he should probably go again to Amboy to-morrow, and pay a visit of friendship, as his two former visits had been, but should not go in an official capacity. We then expressed the hope, that if he did not think it proper to accompany us, that he would favour us with his opinion of the nature of the disease, and the facts relative to its origin. This also he declined, observing, "that he was delicately situated, and did not wish to express to us an opinion on this subject." We then asked him if he had any objection to give us a statement in writing for the information of the board, and that we would call for it on our return from Amboy. This he also begged leave to decline, adding, however, that if the Board of Health would do him the honour to address him a letter, stating the points on which they wished information, he would answer their questions. We then read to him the resolution of the Board, requesting us to obtain from the health officer such information as he possessed on this subject, and added, that we considered the application conveyed by the present resolution as sufficiently respectful, and expressive of the wishes of the Board for him to communicate the information requested: he however persisted in declining to express to us, as a committee from the Board, either verbally or in writing, any opinion on this subject; repeating, "that his situation was a very delicate one." We then observed, that we had understood he had publicly expressed his opinion, at Amboy, of the nature of the fever prevailing there; he acknowledged he had visited Mr. Kearney at Amboy; that he had also seen Mr. Compton, and that he did express to the two physicians of that place, and in presence of a third person, that Mr. Kearney's case was that of malignant fever of the highest grade. As the term malignant fever appeared to us of ambiguous import, we next inquired if he considered the fever referred to as the yellow fever: to this question he answered, he disliked the term yellow fever, considering it an improper one, but admitted that the disease was such as would by many persons be denominated yellow fever, and particularly mentioned, that the patient had the glassy eye and yellow skin. We next asked him, if Mr. Kearney had had the black vomit; to this he replied in the affirmative, but that in the other case the stomach was not so much affected: he also stated that Mr. Kearney had been subject to attacks of bilious fever, and that upon this late occasion, had been very much fatigued, and prior to his attack had been exposed to the sun without an umbrella. We repeated our request, that he would accompany us on our visit, but he again declining to comply with our wishes, we considered our conference at an end. We immediately proceeded to Amboy, and called upon Mr. Daniel Perrein, the collector of the port, and Dr. Nathaniel Manning, the physician who had attended on all those who had been attacked with the disease. The other physician being out of town, we had no opportunity of conversing with him. Dr. Manning informed us, that he had lost four patients with a fever, which, from its peculiar symptoms, and great mortality, he considered to be the yellow fever; that although he had been two years and a half a practitioner in Perth Amboy, and his partner, Dr. Freeman, had practised medicine in the same place many years before him, and both had been familiarly conversant with the fevers which ordinarily prevail in that city and its vicinity, particularly the bilious remittent, yet that they had never, before the present season, met with any fever attended with the symptoms of that of which their late patients had died, and with which others at that time were affected; and as further evidence, Dr. Manning remarked, that at that very time he had patients ill of both diseases, each exhibiting its characteristic symptoms, and invited us to see them. He also stated, that our health officer, Dr. Rodgers, had visited, with him, two of the first cases, and had pronounced them as decided cases of the vellow fever as he had ever seen.

Dr. Manning then gave us an account of those persons who, in his opinion, had died of the yellow fever, namely, James Compton, who was attacked on the 7th, and died on the 10th instant; James Kearney, attacked on the 9th, and died on the

14th: Joseph Compton, attacked on the 11th, and died on the 15th; and Mrs. Crowell, also attacked on the 11th and died on the 15th. He observed, that a Mrs. Marsh, an elderly lady, died yesterday morning, the 17th, after a week's illness; but her disease did not appear to be characterized by the same symptoms that had distinguished the cases of the first persons that have been mentioned. The first four, he remarked, were all seized with severe pain in the head, back, and limbs, attended with a highly inflamed state of the eyes. On the second or third day, the skin, especially about the neck and breast, became yellow, which colour gradually extended over the greater part of their bodies; and in all, the stomach was very much affected with a sense of heat or burning, and rejected almost every thing received into it; which symptoms he had never found associated in the ordinary autumnal, or any other fevers in that place or neighbourhood. We asked him particularly if he had seen Mr. Kearney in any of his former attacks of fever, to which he had been subject in the autumn, as before related to us by Dr. Rodgers. He replied, he had been his physician in two such attacks, and that his disease exhibited the ordinary characters of our common autumnal remittent fever, and was totally different from the inflammatory symptoms with which he was attacked in his last illness. He particularly remarked, that Mr. Kearney threw off a great quantity of black matter, resembling coffee with the grounds, and mixed with other portions in the form of flakes. We next asked Dr. Manning for his opinion relative to the origin of this extraordinary disease. He replied, that there was but one opinion, either with the inhabitants or physicians, namely, that it was derived from some of the West India vessels, which had been lying at the wharves; observing, however, that the brig Ocean, from St. Bartholomews, was the vessel which the inhabitants in general supposed to have introduced it. The town we observed to be remarkably elevated: the soil chiefly composed of sand; free from all lodgements of water; the streets wide, and the houses for the most part spacious, and at a considerable distance from each other; and the whole town exhibiting an uncommon degree of cleanliness. Dr. Manning also informed us, that there were no local causes to which this calamity could possibly be referred, and that it could only be accounted for as arising from intercourse with the vessels at the wharves; and that the citizens were so perfectly convinced of this fact, that they had ordered them to be removed to the stream. He further stated, that Mr. Kearney and the two Mr. Comptons had all been frequently on board the brig Ocean, and another vessel lying along side of her, the ship Favourite from the Havanna, both of which vessels had come consigned to Mr. Kearney. He also observed, that Mr. Joseph Compton had not only been on board of the vessels at the wharves, but that he had set up with his brother James during his illness. Mrs. Crowell, the fourth person mentioned, was the wife of a ship carpenter, who resides at the head of the wharf, within fifty yards of the said vessels. Dr. Manning also stated, that Mrs. Crowell was so near to the vessels, that upon one of them (the Ocean) having her bilge water pumped out, she was made very sick by the smell of it, the wind blowing directly towards the house, and into her apartments, and that she herself, during her illness frequently declared to her physician and friends, that in her opinion she had thus taken the disease. It will be readily observed, that the same wind which blew the effluvia of the bilge water, would also convey the poisonous vapour from the adjoining vessel. Having received this information from Dr. Manning, we accompanied him in his visit to five of his patients whom he considered to be the most dangerously ill. We united with him in opinion, in pronouncing three of those, viz. Miss Ann Taylor, Captain James Baynon, and Mr. Voorhees, to be decided cases of yellow fever.

The diseases of the two others, Mr. Semple and Mr. Kane, were readily distinguished as the common bilious remittent of autumn. The alarming situation of Miss Taylor particularly arrested our attention, although this was the second day of her illness; her symptoms (so peculiar are the features of this disease) were of a character, that declared her to be in the most imminent danger, and with all the kind assistance she receives from her amiable sisters, and the skill of an attentive physician, we have too much reason to fear that she must soon be numbered among the victims of this deadly disease. Miss Taylor resides some distance from the source of infection, but on inquiry, we found she had been unfortunately in the neighbourhood of the vessels, by frequently visiting a friend in the house adjoining to that in which Mrs. Crowell lay ill and died, and that too, at the very time of Mrs. Crowell's illness. We learned also, that the other persons taken ill, had been exposed either directly by being on board the vessels, or by visiting those who were ill of the disease. Many other persons, Dr. Manning informed us, had been just seized with fever, but so recently, that he would not yet undertake to pronounce on the character of the disease. Our attention was also directed to the vessels supposed to have introduced the fever. For this purpose, we applied to the collector of the port, who furnished us with the following facts. That twelve vessels had arrived at that port from the West-Indies, since the first day of June. That many others had arrived from Ireland, full of passengers, in a most filthy condition, but remarkable healthy. He then informed us, that the brig Ocean, the vessel at first suspected, arrived at the wharf on the 4th September, from Bartholomews, that she was laden with rum, sugar, molasses, and coffee, that four or five days after her arrival, she began to discharge her cargo. The master, Captain Sutton, being in New-York, we had no opportunity of obtaining any infor-

mation from him. The collector stated, that Mr. Kearney. as the consignee, was frequently in the hold of the vessel. Captain Little, a passenger in the Ocean, informed us, that her crew had been healthy, but admitted that her bilge water was in a very offensive state, and that in this respect, she was a filthy vessel, but not more so than West-India traders in general. Mr. Perrein next stated, that the ship Favourite, James Stuart, master, the other suspected vessel, arrived from the Havanna, and came to the dock on the 30th August, and was also consigned to the late Mr. Kearney, and that she, with the other vessels, was removed to the stream on Sunday. last; he added, that Mr. Kearney, the consignee, and the two Mr. Comptons, had been also frequently on board of this vessel. Captain Stuart being in Amboy, we availed ourselves of the opportunity of conversing with him, relative to the state of his vessel. He, with great frankness, gave us every information we requested; he stated, that he first went to North Carolina from Perth Amboy, that he next proceeded to Falmouth, (Jamaica,) and from thence to the Havanna, and that he had brought the crew all back with him in a state of health; that they had all been several voyages to the Havanna, some three, four, and five voyages, and were all well seasoned to the West India climate: he also acknowledged that it was very sickly at the Havanna when he was there. Upon questioning him relative to his vessel, he also very candidly stated, that his ballast had not been shifted from the time he left Amboy to this day. Such are the facts we have been enabled to obtain on this subject, and which we beg leave to present to the board without delay. As it has been made our duty to express an opinion of the nature and origin of the disease in question, we feel no hesitation in saying, first, that the disease, in our opinion, is that commonly known and described as the yellow fever; and secondly, that it has been satisfactorily traced to one of the two last. mentioned vessels, arriving from the West Indies, and that it has most probably been derived from the ship Favourite, from the Havanna, which is by all acknowledged to have been a sickly port at the time of her sailing. Nor do we conceive it to be an objection to the correctness of this opinion, that the crew remained healthy throughout the voyage, as it is also stated, that by the several voyages they had made to the Havanna, they had become seasoned to that climate. It will be readily recollected by the board, that a similar instance occurred in July, 1809, at which time two persons from this city worked on board the brig Mary, a vessel from the Havanna, then detained at the quarantine ground, and were seized with the yellow fever, of which they died in this city, although the crew of the same vessel had been in perfect health during the whole of her voyage.

We cannot conclude this communication without remarking, that Mr. Perrein, the collector at Amboy, and Dr. Manning, a physician of the same city, are entitled to our acknowledgments, for the very unreserved and candid manner in which they communicated to us the information they possessed relative to the subject of our inquiries.

We are, gentlemen, very respectfully, Your humble servants,

DAVID HOSACK.

JOS. BAYLEY.

JOHN H. DOUGLASS.

New-York, September 18th, 1811.

To the President and Members of the Board of Health, Extract from the minutes,

J. MORTON, Sec'ry.

The Board of Health of Philadelphia have issued a proclamation, prohibiting all intercourse and communication between the city of Amboy and the city and county of Philadelphia, on account of a pestilential disease prevailing in the former city. Persons, after leaving Amboy, must perform fourteen days quarantine before they can be admitted into Philadelphia.—Public paper of September 20.

### Board of Health, September 24, 1811.

A report of Jacob Lewis, Esq. Recorder of the city of Amboy, dated 21st instant, was read, which stated, that there had been four deaths of the yellow fever in the said city, that no new cases had occurred since the 16th, and that all the sick were now convalescent.

### September 27, 1811.

A letter from the Mayor of Amboy, to the Honourable De Witt Clinton, President of the Board of Health, together with an affidavit of James Seguine, were read, and directed to be entered on the minutes. They were as follows:

# To De Witt Clinton, Mayor of the City of New-York,

I have observed in the newspapers, your proclamation, prohibiting all intercourse between the cities of New-York and Perth Amboy; also the report of the Committee appointed by the Board of Health, to investigate the nature and origin of the disease prevailing in this city. I had not the honour of seeing Doctors Bayley, Douglass, and Hosack, but approve very much of their report respecting the fever originating in one of the two mentioned vessels: more fully to prove this, I send you the affidavit of Captain James Seguine, who piloted the brig Ocean out of this port, on the 24th instant. Also, as it may be satisfactory to the citizens of New-York, I inform you, that the Resident Physician,

Nathaniel Manning, has reported to me, that there has been no new cases for two days past.

I am sir, your obedient humble servant, JOHN ANGUS, Mayor.

Perth Amboy, September 26, 1811.

#### DEPOSITION.

James Segnine personally appeared before me, John Angus, Mayor of the city of Amboy, and deposed and said, that he was employed as Pilot on board the brig Ocean, Sutton, commander; that on the 24th of the present month, he piloted the said brig out of the port. Previous to leaving her, Captain Sutton, or the mate, gave permission to him (Seguine) to collect the coffee which was scattered in the bottom of the vessel, for which purpose he went below, when he immediately heard violent groaning by some sick person or persons: being alarmed, immediately repaired on deck to inquire into the cause, or whence came the groans, when he was answered by the crew, that it was the boy, who then lay sick in the steerage, and very far gone, upon which the deponent left the vessel without collecting the coffee.

JAMES SEGUINE.

Perth Amboy, September 25, 1811.

Ambox—Report of the intendant Physician of that city, to the Corporation.

September 29, 1811.

No new cases of yellow fever have occurred since last Monday week; one death yesterday; all others are entirely recovered, or are convalescent. We have had five deaths of decided cases of yellow fever; one doubtful; viz. James Compton, James Kearney, Joseph Compton, Miss Ann Taylor, and William Craig; Mrs. Crowel a doubtful case. We have no instance of any person taking the fever from those Vol. III.

they attended, except in that part of the town which became infected by the vessel that introduced the malady. The above vessel having sailed, and all others ordered off, no more cases are apprehended.

(Signed) J. LEWIS, Recorder.

General Morton, C. C.

### October 10, 1811.

The President laid before the Board a letter from the Mayor of the city of Perth Amboy, in the following words.

"PERTH AMBOY, October 7, 1811.

"SIR,

"I have the pleasure to inform you, that the fever which has been prevalent here, has subsided; no new case having occurred for fifteen days past, and no person being now sick with that complaint. The last report of the Physician is enclosed.

"I am respectfully, your's, &c.
"JOHN ANGUS."

## The report enclosed was,

"Report for Saturday, October 5, 1811: Of the cases of malignant fever, every case subsided, and not necessary to report hereafter.

### " NATHANIEL MANNING.

Placeto series and and a season

"Mr. John Angus, Mayor of the city of Perth Amboy."

Whereupon resolved, that it be recommended to his honour the Mayor, to issue his proclamation, restoring the intercourse between the two cities.

The Mayor accordingly issued a proclamation to that effect, on the 10th of October, 1812.

The foundation and constitution of the Military Academy established by Congress, at West-Point, in the state of New-York; in a letter from the Hon. Samuel L. Mitchill, to a young gentleman wishing to engage in the military profession: dated Washington, May 10, 1812.

You ask of me, my young friend, information concerning the institution founded by the American government, for the advancement of military education. I cheerfully offer you such a history of the seminary as my memory contains. It is however but a sketch; but may, perhaps, answer your purpose, until some one of the worthy and scientific gentlemen who have been instructed there, shall give us further intelligence concerning so excellent a school.

It was not, I think, until May 1794, (5 Washington) that a law was enacted for raising a corps of artillerists and engineers. It was to consist of seven hundred and sixty-four non-commissioned officers, privates, and artificers, to serve as privates and musicians; with a proportion of commissioned officers to command them. The president was authorised to procure the books, instruments, and apparatus necessary for the corps, and they were enlisted for three years.

In April, 1798, (2 Adams) an additional regiment of artillerists and engineers was authorised to be raised, for five years; and the secretary at war was directed to provide, at the public expense, under the direction of the president, all necessary books, instruments, and apparatus for the use and benefit of the regiment.

Afterwards, in the act passed July 16th of the same year, for augmenting the army of the United States, and for other purposes, the president was authorised by its seventh section to appoint four teachers of the arts and sciences, necessary

for artillerists and engineers, with allowance to them of fifty dollars monthly pay, and two rations per diem.

This useful establishment was continued by the twenty-sixth, twenty-seventh, and twenty-eighth sections of the statute fixing the military peace establishment, which received the executive approbation on the 16th March, 1802. (2 Jefferson.)

The president was thereby authorised and empowered to organize and establish a corps of engineers, to consist of officers and cadets; and to make such promotions, with a view to particular merit, and without regard to rank, as to amount to one colonel, two majors, four captains, four first lieutenants, and four second lieutenants, provided the whole number of the corps should at no time exceed twenty officers and cadets.

The corps when formed was stationed and fixed at West-Point, in the state of New-York, and there established as a MILITARY ACADEMY. But the engineers, assistant-engineers, and cadets of the corps, were at all times subject to do duty in such places and on such services as the president of the United States should direct.

It was enacted that the principal engineer, and during his absence, the next in rank, should preside over the academy, under the direction of the chief executive magistrate of the nation, and the secretary at war was authorised, at the public expense, and under such regulations as the president should make, to procure the books, implements, and apparatus necessary to put the plan into operation.

Business was begun, and progressed with promises of so much advantage, that by an additional act, passed 28th February, 1803, the president was empowered to appoint one teacher of the French language, and one teacher of drawing, to be attached to the corps of engineers; whose pay and emoluments should not exceed those of a captain in the line of the army. By the same law, it was provided, that the

commanding officer of the corps might enlist for a term not less than three years, one artificer and eighteen men, to aid in making the practical experiments, and for other purposes. These were to receive the same pay, rations, and clothing as the artificers and privates in the army, and the same bounty when enlisted for five years. They were also to be subject to the rules and articles of war.

Money was afterwards appropriated for three successive years, to purchase maps, plans, books and instruments, jointly for the war department and the military academy. These years were, if I mistake not, 1803, 1804, and 1805. The respective sums were two thousand, one thousand, and five hundred dollars.

It is worthy your notice, that the military academy has not been mentioned in any of the appropriation laws from 1806 to 1812, inclusive. This will be evident to any person who examines the several acts. On the 18th April, 1806, the money appropriated to purchase maps: plans, books and instruments for the war department alone, was one thousand and five hundred dollars; on the 16th January 1807, fifteen hundred; on the 3d March, 1808, a like sum; on the 3d March, 1809, two thousand and five hundred; on the 2d March 1810, an equal sum; on the 6th February 1811, a similar amount; and lastly on the 21st February 1812, the same number of dollars. During these seven years, the aggregate amount of the money appropriated for these purposes, is fourteen thousand and five hundred dollars. You cannot fail to be satisfied of the generosity of the legislature; and, when you consider, that during this term, no part of the appropriation has been given to the Military Academy, you will be strongly impressed with the variety, extent and value of the library and apparatus at the war department.

The Academy having for several years been in a less prosperous condition than formerly, from a concurrence of causes which I shall not now particularize, several attempts have been made to revive it. New and important regulations were at length introduced by the act of April 29th, 1812, (4 Madison,) both into the corps of engineers and the military academy.

To that corps, as heretofore established, were added two captains, two first and two second lieutenants, one paymaster, four sergeants, four corporals, one teacher of music, four musicians, nineteen artificers, and sixty-two men. A company of bombardiers, sappers, and miners, was formed out of them.

The Military Academy now consists of the corps of engineers, and of the following professors and instructors; first, a professor of natural and experimental philosophy, to receive the pay and emoluments of a lieutenant colonel; secondly, a professor of mathematics, to have the pay and emoluments of a major; and thirdly, a professor of the art of engineering in all its branches, with the pay and emoluments of a major. Each of these professors may have an assistant professor, to be selected from the most promising characters among the officers and cadets, and entitled respectively to the pay and emoluments of captains. The teaching of the French tongue and of drawing, are continued, and provided for as on the former establishment. It is a pity there is not a distinct professorship of chemistry; it may, nevertheless, be taught by an able instructor, as a science appertaining to experimental philosophy. Term that evade und talk has a start to

The cadets already appointed, and to be hereafter appointed, are increased to two hundred and fifty; and may, at the president's discretion, be attached to the military academy, and subjected to its regulations; they may be arranged into companies of non-commissioned officers and privates for the purposes of military instruction, and the knowledge of encampments. Candidates for cadet-ships must not be younger than fourteen, nor older than twenty-one years; and must be

well versed in reading, writing, and arithmetic, before they receive appointments from the president. They shall sign articles, by consent of their parents or guardians, engaging themselves to serve five years, unless sooner discharged, and they shall be allowed for pay, the sum of sixteen dollars per month, and two rations per diem.

After the cadets shall have received regular degrees, from the academical staff, in consequence of having risen through all the classes, they become qualified to obtain commissions in any corps for which they may be judged competent. These are the rewards and honours which students may attain by proficiency and good conduct, and, indeed, they are some of the most powerful incentives that can be applied to the human mind; for, besides the subsistence which is provided by this country for the young votary to science and arms, he has in bright prospect every thing that professional fame and preferment can afford: no institution in the United States holds out to its alumni any encouragement that deserves to be compared with this.

Twenty-five thousand dollars are, by this recent and liberal statute, appropriated for erecting buildings, and for procuring an apparatus, a library, and all necessary implements; and, likewise, for defraying such contingent expenses as in the opinion of the president of the United States may be expedient for the Academy. With this, a handsome beginning may be made, and after the business shall have been commenced, I do not entertain a doubt that under a sound, moral, and intelligent system of tuition, congress will, from time to time, extend to it a munificent and dignified patronage. For I must own to you, I look to this very college, as the place where a portion of our most promising youth is to be trained up in the discipline and lore that shall qualify them, in a peculiar manner, to assert and defend their country's rights.

distance that makes an included the same and in the same

West-Point, that distinguished post in the Highlands of New-York, and the station which is capable of commanding the Hudson, as it passes through that rough and ragged region, is the spot at which this national institution is to be continued in its new form, and with its enlarged endowments.

The objections that have been made to the place, as too remote from society, will soon vanish. It will be easy to extend to it a branch of the general post-office, and thereby afford to all the residents, the advantages of regular and seasonable intelligence. In the progress of improvements, the old roads may be mended, and new ones traced through the passes of the hills. A market will gradually be formed, whereby all manner of necessaries will be brought into the neighbourhood, at fair prices. And during the navigating season, the steam boats, in addition to the other packets and vessels, present uncommon conveniences, for the conveyance of persons and things.

That you may have some idea of the situation of the school to which you intend to connect yourself, I may mention a few particulars. The mountains are of the primitive order, and composed of gray granite; they are interspersed with iron ore, much of which is magnetical. Professor Partridge has ascertained their greatest height to be about one thousand four hundred feet. Yet lofty and compact as they are, the river smoothly penetrates them, without a cataract, and even without rapids: their picturesque scenery has been beautifully delineated by Robertson in his prints; by M'Kinnen in his verses; and by Knight in his geographical surveys. The place is memorable for the elevated fortress which overlooks the plain, named in honour of Putnam; for the defection and treachery of Arnold, in 1780; and for the detection and defeat of that officer's conspiracy with the enemy, by Washington.

Should you wish to make excursions, the site of Fort Montgomery, a few miles to the southward, invites the curiosity of the military student. This work is memorable for the death of Mungo Campbell, and several other British officers, who were slain in the assault made upon it in 1777; and has been further signalized by Trumbull in the painting he executed, of the scene where valiant resistance was made to the invaders on that occasion, by Clinton. About a league further down the river, you find the famous station called Stony-Point, one of the outposts of the British forces, while they held the city of New-York, during the revolutionary war. The storming of this fortification by Wayne, is such a brilliant and successful achievement, that you will tread here, almost, as if you walked upon hallowed ground. From this eminence your eye may trace the road travelled toward Tarrytown, by Andre, to the fatal spot where he was arrested; and behold the precipices of basalt and trapp near Tappan, where he was executed as a spy.

Bending your course to the north, you soon arrive at Newburgh, distinguished for the cantonments of the American army; and for the quelling of a dangerous sedition that had been excited among the continental troops in 1781, by a writer of anonymous letters; and, on the opposite bank you may land in the precincts of Fishkill, a village selected for the seat of government during several years of that eventful period which was terminated by the peace of 1783. But it is time to bring my epistle to an end.

I need not add more than the obvious remark, that the august bird which has been adopted by our people as their emblem, constructs his eyry among the neighbouring crags; and that the candidate for usefulness and renown will imbibe the principles and practice of his profession, beneath the wings of the *Great White Eagle*, who wheels majestic over his head.

With a firm reliance on your industry and enterprise, I anticipate the time when you will come forth, crowned with the well earned wreath of your alma mater, and prepared to engage in the arduous service of your country. In the words of Cicero, jubeo te bene valere.

SAMUEL L. MITCHILL.

## Canal Navigation.

We continue the publication of the official documents relative to the improvement of the inland navigation of the state of New-York. We have also inserted the act on the same subject, recently passed by our state legislature. The able and satisfactory report of the Commissioners, dated March 1812, will appear in our next, when we shall have laid before our readers all the official proceedings on this highly interesting and important subject.

Copy of the Application made to the different States and Territories.

SIR,

By a law of the state of New-York, of which we do ourselves the honour to enclose to your excellency an exemplified copy, we are directed to apply to the Congress of the United States, or to the Legislature of any State or Territory, to co-operate and aid in opening a communication, by means of a canal navigation, between the great lakes and Hudson's river.

The good sense of the state over which you, sir, preside, will readily perceive the benefit which must result from such navigation. But whatever may be the peculiar advantages which locality may give to particular parts of the United States, we feel a conviction, that the general advantage to the whole nation is of such preponderating influence, as to

render the present object of principal, if not exclusive, concern to the national legislature.

The state of New-York is not ignorant of the special benefit which she might secure to herself by holding in her own hands the best communication between the territory around the lakes, and the Atlantic ocean; neither is she so devoid of enterprise or resource as not to open the abundant source of influence and revenue.

But she is disposed rather to grant, than withhold accommodation, and not only to enter into every reasonable stipulation, but to give the aid of her legislative authority to those measures which, in prosecution of the business, may be found needful.

There are two modes, sir, by which your state may contribute to this great work; by pecuniary appropriations, and by that influence in the councils of the union, to which she is entitled. The former mode will certainly not be unacceptable. Whether the money granted shall be in the form of a gift or a loan, will, of course, depend on the ulterior consideration, whether the canal is for ever to be free, or whether, being made at the expense of New-York, it shall be subject to such transit duties as, from a regard to her special interest or convenience, she may, from time to time, think proper to impose. In the former case, the bounty of your state will be patriotically offered and frankly received. Loans may, in both cases, be useful.

But what appears to us most suitable to the occasion, and which, therefore, we most earnestly solicit, is, the exercise of your state influence in the public councils of our country, to provide for the whole expense of this canal; which, to use the pertinent expressions of the law under which we act, will encourage agriculture, promote commerce and manufactures, facilitate a free and general intercourse between different parts of the United States, tend to the aggrandizement and prosperity of the country, and consolidate and strengthen the union.

We take the liberty to request that your excellency will have the goodness to communicate this application to the Legislature of your state, and give it that aid which it may, in your opinion, deserve.

With perfect respect,

We have the honour to be, &c.

GOUV. MORRIS, S. V. RENSSELAER, DE WITT CLINTON, SIMEON DE WITT, W. NORTH, THOMAS EDDY, ROB. R. LIVINGSTON.

Albany, March, 1812.

Copy of a Letter to the President of the United States. SIR,

The enclosed exemplification of a statute, passed the eighth of last April, will show that we are empowered to make application, on behalf of the state of New-York, to the Congress of the United States, on the subject of a canal between the great lakes and Hudson's river.

An object of such general concern, seems to be within the scope of that information which is to be communicated to the National Legislature by the President of the United States, and, therefore, we deem it our duty to place it in your hands.

We do not assign reasons in its support, because they will not escape your penetration; neither do we solicit your patronage, because we rely on your patriotism. It is submitted to your consideration in the most simple form, and we have charged two of our members, Gouverneur Morris and De Witt Clinton, to give you, sir, in presenting this letter, the personal assurance of that respect, with which

> We have the honour to be, Your most obed't serv'ts.

The following Documents accompanied the message of the president of the United States, on the 23d of Dec. 1811.\*

WHEREAS it is expedient to open by inland navigation, as soon as circumstances will permit, the various communications which may be effected by the rivers, sounds, bays and lakes of the United States, between the northern and southern, the eastern and western parts of their territory, and especially a communication along the sea cost, from Boston or Barnstable bay, to Naraganset or Buzzards bay, from Rariton river to Chesapeake bay, and from Chesapeake bay to Albemarle sound; also, a communication from Lake Champlain to Hudson's river, from Lake Erie to Hudson's river, the Susquehannah, the Muskingum and the Wabash, from Lake Michigan to the Illinois, from the Susquehannah to the Schuylkill and the Delaware, from the Roanoke, above its great falls, to the Chowan or Mehevrin, from the Tennessee to the Tombigbee, from the Cooper river and Black river to the Santee, and from the Savanna to the Tennessee; also, to construct locks round the falls of the Ohio, and to meliorate the navigation of the Potomac above the falls.

Be it therefore enacted, &c. That the lands, hitherto unappropriated, in the Michigan territory, and that part of the Indiana territory lying north of the fortieth degree of latitude, be, and they hereby are appropriated to the said several objects, and to such others of the same or a similar kind, as the wisdom of Congress may hereafter designate.

<sup>\*</sup> See Register, vol. 2. p. 450.

II. And be it further enacted, That one million acres of land, part of the tracts above mentioned, shall vest in and belong to the state of Massachusetts, so soon as a canal navigable for vessels drawing six feet water, shall be opened between the Boston and Naraganset bays, or between the Barnstable and Buzzard bays; on condition, nevertheless, that no tax, toll or impost, shall be levied or taken for the passage of such vessels on the same canal, other than what may be needful to pay the annual expense of superintending and keeping the same in repair.

III. And be it further enacted, That five hundred thousand acres of land, part of the tracts above mentioned, shall vest in and belong to the state of New-Jersey, so soon as a canal, navigable for vessels drawing six feet water, shall be opened between the Raritan and Delaware rivers; on condition, nevertheless, that no tax, toll or impost shall be levied or taken for the passage of such vessels on the same canal, other than what may be needful to pay the annual expense of superintending and keeping the same in repair.

IV. And be it further enacted, That four hundred thousand acres of land, part of the tracts above mentioned, shall vest in and belong to the state of Delaware, so soon as a canal, navigable for vessels drawing six feet water, shall be opened between the Delaware river and Chesapeake bay; on condition, nevertheless, that not more than twenty cents per ton shall be levied or taken for the passage of vessels on the same canal.

V. And be it further enacted, That two hundred thousand acres of land, part of the tracts above mentioned, shall vest in and belong to the state of Virginia; so soon as a canal, navigable for vessels drawing six feet water, shall be opened between the Chesapeake bay and Albemarle sound; on condition, nevertheless, that no tax, toll or impost shall be levied or taken for the passage of such vessels on the same canal, other

than what may be needful to pay the annual expense of superintending and keeping the same in repair.

VI. And be it further enacted, That four hundred thousand acres of land, part of the tracts above mentioned, shall vest in and belong to the state of New-York, so soon as a canal, navigable for flat bottomed boats of twenty tons burthen, shall be opened between the Lake Champlain and the tide waters of Hudson's river; on condition, nevertheless, that no tax, toll or impost shall be levied or taken for the passage of such boats on the same canal, other than what may be needful to pay the annual expense of superintending and keeping the same in repair.

VII. And be it further enacted, That four million acres of land, part of the tracts above mentioned, shall vest in and belong to the said state of New-York, so soon as a canal shall be opened from lake Erie to Hudson's river, not less than sixty-three feet wide on the top, forty-five feet wide at the bottom, and five feet deep, (and, if practicable, along an inclined plane, descending not more than six inches in a mile,) to Hudson's river, or a bason within four miles thereof: on condition, nevertheless, that no tax, toll or impost shall be levied or taken for the passage of boats not exceeding sixty feet long, eighteen feet wide, or drawing more than three feet of water on the same canal, other than such as may be needful to pay the annual expense of superintending and keeping the same in repair.

VIII. And be it further enacted, That one hundred thousand acres of land, part of the tracts above mentioned, shall vest in, and belong to the state of Pennsylvania, so soon as a canal, navigable for boats of ten tons, shall be opened between the lake Erie and the Susquehannah river.

IX. And be it further enacted, That one hundred thousand acres of land, part of the tracts above mentioned, shall vest in, and belong to the state of Ohio, so soon as a canal

navigable for boats of ten tons, shall be opened between the lake Erie and the Muskingum; and that one hundred thousand acres of land, also part of the tracts above mentioned, shall vest in, and belong to the said state of Ohio, so soon as a canal, navigable for boats of ten tons, shall be opened from the lake Erie to the Wabash; on condition, nevertheless, that no tax, toll or imposts shall be levied or taken for the passage of such boats on the said canals, or either of them, other than what may be needful to pay the annual expense of superintending and keeping them in repair respectively.

X. And be it further enacted, That one hundred thousand acres of land, part of the tracts above mentioned, shall vest in, and belong to the state of New-York, so soon as a canal, navigable for boats of ten tons, shall be opened from the lake Michigan to the Illinois river; on condition, nevertheless, that no tax, toll or impost, shall be levied or taken for the passage of such boats on the same canal, other than what may be needful to pay the annual expense of superintending and keeping the same in repair.

XI. And be it further enacted, That eight hundred thousand acres of land, part of the tracts above mentioned, shall vest in, and belong to the state of Pennsylvania, so soon as a canal, navigable for boats of ten tons, shall be opened from the Susquehannah to the Schuylkill, and from the Suchylkill to the Delaware.

XII. And be it further enacted, That three hundred thousand acres of land, part of the tracts above mentioned, shall vest in, and belong to the state of North-Carolina, so soon as a canal, navigable for boats of ten tons, shall be opened from above the great falls of the Roanoke river, to the Chowan or Mehevrin rivers; on condition, nevertheless, that no tax, toll or impost, shall be levied or taken for the passage of such boats on the same canal, other than what may be needful to

pay the annual expense of superintending and keeping the same in repair.

XIII. And be it further enacted, That two hundred thousand acres of land, part of the tracts above mentioned, shall vest in, and belong to the state of Tennessee, so soon as a canal, navigable for boats of ten tons, shall be opened from the Tennessee river to the Tombigbee river.

XIV. And be it further enacted, That two hundred thousand acres of land, part of the tracts above mentioned, shall vest in, and belong to the state of South-Carolina, so soon as a canal, navigable for boats of ten tons, shall be opened from the Cooper river and the Black river to the Santee.

XV. And be it further enacted, That one million acres of land, part of the tracts abovementioned, shall vest in, and belong to the state of Georgia, so soon as a canal, navigable for boats of ten tons, shall be opened from the Tennessee to the Savannah river; on condition, nevertheless, that no tax, toll or impost, shall be levied or taken for the passage of such boats in the same canal, other than what may be needful to pay the annual expense of superintending and keeping the same in repair.

XVI. And be it further enacted, That three hundred thousand acres of land, part of the tracts above mentioned, shall vest in, and belong to the state of Kentucky, so soon as proper locks shall be constructed to take round the falls of the Ohio, vessels of tons; on condition, nevertheless, that no tax, toll or impost shall be levied or taken for such vessels passing through the said locks, other than what may be needful to pay the annual expense of superintending and keeping the same in repair.

XVII. And be it further enacted, That two hundred thousand acres of land, part of the tracts above mentioned, shall be, and the same are hereby granted to the company incorporated by the states of Maryland and Virginia, for improving the navigation of the Potomac, to be applied by the said company in ameliorating the said navigation.

XVIII. And be it further enacted, That none of the said lands shall be sold or disposed of for a price less than two dollars per acre; neither shall any settlement be made thereon until the Indian title shall be regularly and fairly extinguished. But the said several tracts may be severally and respectively pledged as a security for loans, the amount whereof, shall be employed for the purposes respectively designated.

XIX. And be it further enacted, That the public faith be, and the same hereby is pledged for the redemption of the capital of loans, made equivalent to the lands, (at the rate of two dollars per acre,) granted in the second, third, fourth, fifth, sixth, seventh, ninth, tenth, twelfth, fifteenth, and sixteenth sections of this statute, at the end of twenty years from the period when such several loans shall have been made. Provided, that the money borrowed shall have been justly applied to the objects respectively specified, and that the tracts so granted, shall be respectively retroceded to the United States. It is, nevertheless, to be understood, and is hereby declared and enacted, that if the state, to which any such cession is hereby made, shall, within ten years, declare the intention to accept the grant of land finally, and relinquish the pledge of public faith hereby given, such grant shall be final, and the pledge of faith shall be void.

XX. And be it further enacted, That the President of the U.S. for the time being, shall, on due application to him made, designate, from time to time, by metes and bounds, the several tracts contemplated by the provisions of this statute, and which are not herein designated; and the acceptance of any state of any grant, shall be considered as an agreement to the condition which is hereby annexed to such grant.

XXI. And be it further enacted, That a tract containing four million, five hundred thousand acres, in a parallelogram, extending from east to west, across the north end of the Indiana territory, shall be, and hereby is appropriated to the conditional grants herein before made to the state of New-York, which parallelogram shall be divided, by meridian lines, into three several tracts, of which the eastern tract, containing four hundred thousand acres, shall apply to the object specified in the seventh section; and the western tract, containing one hundred thousand acres, shall apply to the object specified in the seventh section; and the western tract, containing one hundred thousand acres, shall apply to the object specified in the tenth section of this statute.

An Act further to provide for the improvement of the Internal Navigation of the State, passed 19th June, 1812.

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Be it enacted by the people of the state of New-York, represented in senate and assembly, that the commissioners mentioned in and by the act, entitled, " an act to provide for the improvement of the internal navigation of the state, passed the 8th day of April, 1812, to wit, Gouverneur Morris, Stephen Van Rensselaer, De Witt Clinton, Simeon De Witt, William North, Thomas Eddy, Peter B. Porter, Robert R. Livingston, and Robert Fulton, be, and they are hereby authorized and empowered, on behalf of this state, upon such terms and conditions as they shall deem reasonable, to purchase all the rights, interest, and estate, of the "President, Directors, and Company of the Western Inland Lock Navigation, in the state of New-York," of, in, and to the inland waters of this state, together with the locks, canals, lands, and other property which may be vested in, or which may have been acquired by the said president, directors, and company, under or by virtue of any law of this state, so as

to procure to the people of this state, a conveyance or surrender of all the rights, interest, and estate of the said corporation; and in case of such conveyance or surrender being made, it shall and may be lawful for the said commissioners. and they are hereby required to take the charge and management of the said locks, lands, and all other property so by them to be purchased as aforesaid, on behalf of the people of this state, with the like powers of appointing toll collectors and other agents, to exact the same tolls to the use of the people of this state, and to make all such other rules and regulations in regard to the same, as the president, directors, and company of the western inland navigation in the state of New-York, can or may now lawfully make or establish; and that every person who shall, after such conveyance or surrender, do any trespass or other injury, to the said canals, locks, lands, or other property aforesaid, or shall violate any of the rules and regulations, so as aforesaid to be established by the said commissioners, such person so offending, shall be liable to the same penalties, and shall pay the like damages as such offenders would now be liable to, for the like acts, under the by-laws and regulations of the said corporation, and the laws of this state, to be recovered in the name of the said commissioners, to the use of the people of this state.

Provided, that nothing in this act contained, shall authorize the said commissioners to make any other than a conditional purchase of the said president, directors, and company, to become absolute when the said commissioners shall have satisfactory information from some experienced engineer, by an actual examination, that the accomplishment of the contemplated canal is practicable, and when the said commissioners shall be authorized by an act of the legislature, to commence their operations for opening said canal.

2. And be it further enacted, That the said commissioners be, and they are hereby authorized, to procure any volun-

ple of this state, from any person or persons, bodies politic or corporate, who may be inclined to make the same, for the purpose of the contemplated inland navigation from Lake Erie to Hudson's river, or for establishing a fund to be applied towards the accomplishment of the said object. And whereas it appears by the report of the said commissioners, lately presented to the legislature, that a favourable opportunity now occurs for procuring a loan of money on the credit of this state; and whereas it is desirable that this state should possess the means of effectually prosecuting the important object of opening said inland navigation, if upon full examination by a competent and practical engineer, and mature deliberation, the legislature shall hereafter deem it expedient to undertake that interesting work. Therefore,

- 3. Be it further enucted, That the aforesaid commissioners be, and they are hereby authorized and empowered, on behalf of this state, to borrow a sum of money, not exceeding five million of dollars, upon a loan for not less than fifteen years, and at a rate of interest not exceeding six per centum per annum, exclusive of incidental expenses of negotiating said loan; and the said commissioners are hereby authorized, to pledge the faith of this state, for the payment of such interest, and for the reimbursement of said principal sum, so to be borrowed as aforesaid.
- 4. And be it further enacted, That the sum so to be borrowed by the said commissioners, be invested, in the name of the people of this state, in public stock, or such other fund or funds, as in their opinion, by and with the advice and consent of the person administering the government of this state, may be most safe and productive, with full power in the said commissioners, from time to time, in their discretion, and with the consent of the person administering the government of this state, to control the monies so invested, and the

interest thereof, by transferring the same, or any part thereof, from one fund to another, and upon such securities and assurances, as they may deem proper, on behalf of the people of this state.

5. And be it further enacted, That it shall be the duty of the said Commissioners, and they are hereby required, punctually to pay the interests, which from time to time shall accrue upon the monies so to be borrowed as aforesaid. And the said commissioners shall annually make a report to the legislature of this state, exhibiting a particular account of the monies so to be borrowed as aforesaid, of the fund or funds in which the same shall be invested, and of all payments, receipts, and expenditures relating thereto.

Extract of a letter from a Member of the national institute of Paris, to a correspondent in New-York, dated Paris, November 2d, 1811.

"I have just received the second edition of the Catalogue of the Elgin Garden, and also the Statement of Facts. All our professors admire the constant exertions made for the promotion of medical science. It reflects much honour upon the state of New-York, that they have at length taken charge of an establishment which they have found one among themselves able to raise, and which renders science more easy and more pleasing to be acquired. We all give our thanks to Dr. Tillary and Dr. Bard, who first recommended the subject to public attention, and to the senator Clinton and Dr. Mitchell, &c. &c. who were its advocates in the legislature. The whole will be noticed in the annals of the Museum of Natural History in Paris," &c.

Botanic Garden of the State of New-York.

We again have the pleasure to state, that, through the spirited exertions of M. Thouin, of Paris, aided by the kind attention of J. B. Warden, United States consul at that place,

important additions have recently been made to this establishment, by several extensive collections of seeds, of rare and valuable exotic plants, from the Jardin des Plantes.

## Scudder's American Museum.

Every cultivator of the science of natural history, and every lover of rational and useful knowledge, cannot but be gratified with the zeal and industry of the proprietor of this establishment, and the great success which has thus far attended his exertions, in behalf of the laudable purposes to which they are directed. Though little more than two years have elapsed since the formation of the American Museum, such has been the ardour with which Mr. Scudder has pursued his object, as already to have formed a collection of materials, deservedly considered among the most respectable of the kind in the United States. The uncommon abilities which he displays in preparing the numerous subjects in the different branches of natural history, would do honour to any artist. We forbear, at this time, an enumeration of the various specimens of beasts, birds, insects, serpents, &c. His cabinet will excite the attention of the most indolent, and give instruction to the most improved mind.

# Chiappi's Anatomical Representations.

The city of New-York has recently received a valuable accession to medical science, by the arrival of Mr. Joseph Chiappi, anatomist, of Ancona, Italy, and formerly wax sculptor of anatomy for the university of Férrara. This ingenious gentleman has long been known in his native country for various specimens of skill in that department of the profession to which he has devoted himself; and his merits as an artist are acknowledged to be of the highest order. During his short residence among us, he has added to his reputation, and has lately completed several highly valuable preparations.

Among them is an exhibition of the human ear, on an enlarged scale, which illustrates, in the happiest manner, the intricate structure of this delicately organized part of the human body. This valuable preparation and example of his skill, is now added to the private cabinet of Dr. Hosack, of this city.

## New-York Historical Society.

The New-York Historical Society are preparing a second volume of their Collections for the press.

Abstract of the Bill of Mortality, published by the Board of Health of Philadelphia, during the years 1803 and 1809.

DEATHS IN EACH MONTH, DURING 1808.

To the same of	1	NAMES.	30種類問題	ADULTS.	CHILDREN.
January		175	100 E A 10	91	45
February		-	20000 6	73	50
March				91	63
April -	1	413 46 68	Commenter of the state of the s	96	73
May -	Service of	1 - 1 . Sec.	Personal / 1985 14	81	98
June -	5584	ALC: NO	SECTION OF THE PERSON	95	132
July -	-		of the second second	111	263
August -		AL NO. WALL	CONTRACTOR OF THE PARTY OF THE	109	188
September			and the distance	88	97
October -	-		Section of the Contraction of	71	83
November			established the same	81	71
December	197	Han The	Acceleration and the second	59	62
u Maldender	Guide	Stor American	January Charles	A STATE OF THE STA	
Total	S Delta	-		1046	1225

DEATHS IN EACH MONTH, DURING 1809.

the special section	NAMES. ALC: ALC COMMENCE	ADULTS.	CHILDREN.
January -		73	57 31
February -	at a state its - The sens self	67 mm	51
March -	CONTRACTOR OF THE CONTRACTOR O	95	46
April		80	56
May -		66	84
une -	Sign translate average and electrical	82	102
July	THE TWO THERMS STATE	58	131
August		183	107
September -	a grand and a second	87	80
October		91	85
November -	THE REPORT OF THE PARTY OF THE	83	106
December -		63	76
Total -	<b>公共的时间</b>	1023	981

Bill of Mortality, for Portimouth, New-Hampshire, for A. D. 1809. Communicated to the Editors, by Lyman Spalding, M. D.

Complaints.	Age.	No
Apoplexy	78 years	10.
Atrophy	1w 76y 3d 2, 5, 68y 2m 2, 47y 10d 4m 56, 2y	1
Chlorosis	13 years	Peg.
Cholera of Infanta	4m 2, 2y 1m 1, 1, 1y	150
Consumption	33, 55, 36, 23, 63, 35, 64, 58, 20, 21, 42, 37, 25, 51 69, 40, 15, 41, 38, 41, 23, 28, 17, 25, 44, 28, 34y	2
Convulsions	5m 2y 6m 4y	1 3
Croup	2 years	9
Dropsy	40, 60, 2 years	1 4
Dropsy in the Brain	2, 13y 5m 2, 5, 4, 2y 3m	1
Erythema	3m lw	
Fever inflammatory	5, 4 years	8 6 3
petechiæl	9 years	100
puerperel	18, 44 years	50 750
pulmonic	52, 75, 78, 5y 4 months	-
Gout	74 years	門馬
Hæmorrhage	69, 52 years	32 33
Hooping Cough	1, 3 years	
Inflammation	46 years	23 23
Mortification	53, 67 years	75 FF
Old Age	89, 90, 77, 89, 90, 79, 78 years	and the
Palsy	58, 74, 87, 60 years	SS 163
Phrenitis	50 years	30 30
Quinsy	7m 1, 1 year	865 ZP
Schirrus liver	25 years	B23 86
Casualties.		1
Burnt	75, 4, 1 year	(8) Jan
Drowned	2,7 years	40
Overlaid	2 months	A STATE
Run over by a waggon	45, 5 years	100
Suicide Births.	19, 25 years	
Males 130 2	The state of the same and the same and the	160 10
Females 122		100
Still born.	6	000
	84	230

Total 11

Portsmouth, the capital of the state of New-Hampshire, situated forty-three degrees five minutes north latitude, and six degrees, twenty-six minutes east longitude from Washington, contains six thousand nine hundred and thirty-four inhabitants.

The month of January exhibited the coldest, as well as the most remarkable change of weather, ever recorded in New-Hampshire. At 12 o'clock at noon, of the 18th, the thermometer was at forty-two degrees, and at 12, the 19th, it had fallen 12 degrees below zero. It fluctuated between seven and fourteen degrees below zero, from the 19th to the 22d. We do not find that either this sudden change, or extreme cold weather, had any material effect on the health of our citizens.

VOL. III.

Observations on the Weather of the city of New-York, for the months of April, May, and June, 1812.

#### APRIL.

The weather of the month of April, was remarkable for the great number of rainy and overcast days, and for several very heavy falls of rain, accompanied with strong wind from the N. E. The temperature of the air, though for the most part cold, at several times underwent very considerable changes. On the morning of the 6th, a large quantity of rain fell, followed by snow. On the 9th and 10th, we had more rain. Thermometer on the 10th at 7 A. M. 48, at 3 P. M. at 53, and at 7 P. M. 50. On the morning of the 12th at 7 A. M. thermometer stood as low as 29, at 3 P. M. it rose as high as 53 degrees, at 7 P. M. at 42. On the 19th, at 4 1-2 P. M. we again experienced another very heavy shower, accompanied with thunder, lightning, and hail; many of the hail stones were nearly an inch in diameter. On the 25th, the 27th, and on the 30th, more rain.

## MAY.

The weather of May, though more pleasant than that of the preceding month, was not unlike it as to the repeated falls of rain we experienced, and the number of overcast and cloudy days. A small quantity of snow fell on the 4th, accompanied with wind from the N. E. On the night of the 11th, we experienced a very heavy fall of rain. On the 13th, the weather became pleasant. On the 15th, however, and for the seven subsequent days, high winds from the N. E. accompanied with considerable showers of rain. On the 21st, considerable thunder and lightning. During the remaining part of the month, the weather was generally clear, pleasant, and temperate, if we except the 28th, when it rain-

ed the greater part of the day. The greatest degree of thermometrical heat, was on the 29th, when the mercury stood at 7 A. M. at 57, at 3 P. M. at 76, and at 7 P. M. at 70 degrees.

### JUNE.

June was remarkable for its number of rainy, overcast, and cloudy days, and for the great uniformity in the temperature of the weather. We experienced heavy rains, or showers, not less than on seventeen different days. The mercury in the thermometer generally varied during the month, at 7 a. m. from 58 to 71, at 3 p. m. from 70 to 83, and at 7 p. m. from 64 to 78 degrees. Great quantities of rain fell on the 2d, 3th, 11th, 13th, 16th, and on the 26th, during which times the wind was generally from the eastward.

Quarterly Report of the Diseases which prevailed in the city of New-York, during the months of April, May, and June, 1812.

In the account given in the last number of this work, of the diseases of February and March, it was observed, that owing to the vicissitudes of that season, the diseases exhibited a very unusual violence, and were attended with an uncommon mortality. We have occasion to repeat the same observation relative to the diseases which have appeared since that period, particularly those of April and May, which assumed a character very rarely met with at this season of the year. The month of June has been comparatively healthy.

The diseases of April and May have been chiefly those of an inflammatory type, and intermitting fevers of the tertian form.

Among the inflammatory diseases, peripneumony was most predominant, and frequently assumed the typhoid form of that disease, the peripneumonia notha of Huxham. The writer of this account has met with some cases of this complaint, both in his own practice and in that of others. As far as he has seen the disease, it exhibited itself in the first stage as purely inflammatory, and was attended with great pain in the chest, especially upon inspiration; a full and active pulse, the tongue covered with a white fur, and other symptoms indicating the most acute inflammation; and in correspondence with this view of the disease, he employed the lancet freely, not only taking from the patient a large quantity of blood, but repeatedly, and at short intervals: this remedy followed by a large blister applied to the chest, together with evacuations by the bowels, and attention to the other excretions generally effected a cure. In one case, blood-letting was for the first time employed as late as on the seventh and eight days of the disease, and was followed with immediate relief, and the ultimate restoration of the patient; in another, the lancet was employed seven times during the first four days of the disorder, when the patient also obtained relief.

An opinion, however, has prevailed with many practitioners, that blood-letting was injurious, and accordingly was not employed at all, or very sparingly. We are not surprised at the typhoid termination of those cases, and that they should exhibit all the malignancy of peripneumonia notha, even with bloody expectoration, petechiæ, and other symptoms indicating a vitiated state of the whole circulating fluids. In consequence of the petechiæ which appeared in the advanced state of the disease, by many physicians it was denominated spotted fever!! In many cases assuredly, those malignant symptoms were exclusively ascribable to the neglect of those remedies which are alone calculated to allay inflammation. In others, the writer is informed, and by those too who are qualified both by education and a practical acquaintance with diseases, that in the upper parts of the city

where the inhabitants are numerous, and frequently crouded in small apartments, deprived of the comforts of cleanliness and ventilation, that the disease exhibited the malignant typhoid symptoms before adverted to at so early a stage, that the use of the lancet was prejudicial in most of the cases in which it was employed, and that the only means which were found beneficial, were mild cathartics, blisters, and sudorifics; viz. small doses of calomel, James' powder, and opium, aided by the usual diluents, and in some cases the free use of the Virginia snake root. Among the poor it is also stated to have been a contagious disease, passing in succession through the different families in which it was introduced.

The various conditions of life, doubtless in this, as in other febrile disorders, produce a correspondent variety in its type. degree of violence, and termination. We cannot, however, but express our belief, that in many instances, the timidity of the practitioner has prevented him from employing a sufficiently vigorous practice in the commencement of this disease, and that the more malignant symptoms which supervened, the bloody expectoration, the serous effusion in the lungs, and the petechiæ have been frequently the consequence of the inert practice which has been so generally pursued. It is also to be observed, in correspondence with this remark, that the cynanche tonsillaris, enteritis, &c. have been unusually prevalent, and attended with symptoms of the most acute inflammation, requiring the repeated use of blood-letting and other depleting remedies. Intermittents have also, during the same period, exhibited an uncommon degree of obstinacy, in many instances resisting the bark and other remedies usually employed: in these cases we have prescribed Fowler's arsenical solution with the best effects, especially with children, who are generally unable to take the bark in sufficient quantities to counteract the disease. In those cases in which the bark was prescribed we have had the most satisfactory evidence of the superior quality of that which is selected and prepared by Dr. Sanford,\* and which we earnestly recommend to the attention of physicians.

Among other diseases which have presented themselves to our notice, are uterine obstructions, which are of frequent occurrence in our variable climate. We are more especially led to notice this subject, as we observe that our practitioners in general do not appear sufficiently attentive to the connection which subsists between this function and the condition of the whole system, particularly as it regards the state of the blood-vessels. No less than ten cases are recorded as occurring in the private practice of the writer during the last month.

In some, the irritation produced by the obstruction, manifested itself in the uterus producing an enlargement of that organ, a sense of bearing down, with pressure on the bladder and rectum, and an acute pain throughout the uterine region, occasionally extending into the lower extremities. In other cases, the stomach was affected with nausea, loss of appetite, and other symptoms of indigestion, followed by general debility and emaciation; in some, it produced frequent returns of pain and spasm in the intestines, showing itself in the form of colic, and sometimes attended with great soreness over the whole abdomen, indicating the more formidable inflammatory symptoms of enteritis. In other cases, the obstruction was followed by pain of the head, vertigo, and numbness of the extremities, and with other symptoms demoting a surcharged state of the blood-vessels in general.

Those cases of obstruction also appeared at different periods of life, in some they arose from sparing and partial menstruation, although returning at the regular periods; in

<sup>\*</sup> See Medical and Philosophical Register, vol. II. p. 398. 487.

others, from a sudden and total suppression, the consequence of change of dress and exposure to the vicissitudes of the weather at the time the menses were flowing; while in others, and those the most numerous, the complaints induced were the effect of the sudden fulness of the habit succeeding the patural cessation of the catamenia at the ordinary period at which they disappear; and in part occasioned by want of exercise, which is too commonly neglected at that time of life. But in all those cases the most decided advantage was obtained from depletion, especially by means of the lancet, which remedy, in cases of this nature, we observe to be too little attended to by the physicians of this city, particularly the younger members of the profession: their disregard of this remedy manifestly arises, as before observed, from their inattention to the connexion which exists between the general state of the system, and the important function of menstruation; and which connexion, we remark, does not even receive that attention from medical writers, which its importance demands. The celebrated Dr. Denman, whose writings furnish, in general, the best practical guides, upon the subjects of which they treat, does not, in our opinion, attach sufficient value to this function, either as it regards its final cause, or the diseases to which it gives rise.

### RECENT AMERICAN PUBLICATIONS

An Essay on the Organic Diseases and Lesions of the Heart and Blood-vessels. From the Clinical Lectures of J. N. Corvisart, first Physician to their Imperial and Royal Majesties, &c. &c. Published under his inspection, by C. E. Horeau, M. D. Surgeon, &c. Translated from the French with Notes. By Jacob Gates, M. M. S. S. Byo, Boston, Bradford and Read.

The American Medical and Philosophical Register: or Annals of Medicine, Natural History, Agriculture, and the Arts. Conducted by a Society of Gentlemen. 8vo. vols. I. and II. with superior engravings. New-York. C. S. Van Winkle, for the Proprietors.

The Emporium of Arts and Sciences, conducted by John Redman Coxe, M. D. Professor of Chemistry in the University of Pennsylvania. Nos. I. and II. for May and June. 8vo. Philadelphia. Delaplaine.

Documents tending to prove the superior advantages of Rail-ways and Steam-Carriages over Canal Navigation. Svo. New-York. T. & J. Swords.

A Statistical Account of the Towns and Parishes in the State of Connecticut. Published by the Connecticut Academy of Arts and Sciences. By Timothy Dwight, D. D. &c. &c. 8vo. New-Haven. Walter & Steele.

Dissertation on Chronic Debility of the Stomach. Published by the Connecticut Academy of Arts and Sciences. By Benjamin Woolsey Dwight. 8vo. New Haven. O. Steele & Co.

#### OBITUARY.

Dreo, at Canajoharie, on the 25th of May, 1812, in the 75th year of his age, the Rev. Johannes Gros, D. D. formerly pastor of the German Reformed Church in this city, and professor of Moral Philosophy in Columbia College.

At St. Vincents, West-Indies, ALEXANDER ANDERSON, M. D. superintendent of the Royal Botanic Garden of that place, &c.

### TO READERS AND CORRESPONDENTS.

Every effort has been made to render the present number of the Register worthy the support of an enlightened and liberal profession; and it is hoped that its appearance will not disappoint the highest expectations of its numerous and respectable patrons. The manner in which the work will in future be executed, is now before the public, and as a specimen of typography, it is believed, will not suffer by comparison with any other similar journal now published. As to the matter embraced in the Register, as heretofore, it is derived from original sources, and in justice to their correspondents, the editors have no timidity to say, that most of it is of immediate importance and of permanent value.

The editors regret their inability to furnish any other than a profile (though a very striking) likeness of the late Dr. Miller.

A due regard to the rights of intellectual property induces the editors to state, that in several instances, periodical journalists, both abroad and at home, have availed themselves of articles in the Register without the least notice of the work to which they were indebted. Infuture, the authors of an act so manifestly unjust and dishonourable, need not be surprised to see their names brought before the public.

A Review of Dr. Barton's Collections towards a Materia Medica of the United. States will appear in our next.

<sup>\*\*\*</sup> Communications for the American Medical and Philosophical Register, are requested to be addressed to Dr. David Hosack, New-York.